

# Séminaires

## Séminaires donnés par les personnels LPSC

### 2010

- D. Heuer – Les réacteurs de 4<sup>me</sup> génération sont-ils l'avenir du nucléaire ? – SIMAP (Grenoble INP), 19 janvier
- R. Bonciani- Top-antitop production at the LHC – University of Zurich, Switzerland, 25 mars
- R. Bonciani- Top-antitop production at the LHC – Theory-LHC France, IPN Lyon, 6 avril
- R. Bonciani – Top-antitop production at hadron colliders – IPHC (Strasbourg), 28 mai
- R. Bonciani – Top-antitop production at hadron colliders – ICHEP (Paris), 23 juillet
- R. Bonciani – Top-antitop production at hadron colliders – HP2.3rd GGI (Florence), 15 septembre
- R. Bonciani – Top-antitop production at hadron colliders – New York City College of Technology (New York), 28 octobre

### 2011

- C. Renault – Premiers résultats de la mission Planck – LPTA de Montpellier, 25 janvier
- R. Bonciani – Top-antitop production at hadron colliders – University of Freiburg, 1<sup>er</sup> février
- R. Bonciani – Top-antitop production at hadron colliders – University of Rome, 14 février
- D. Heuer – Les réacteurs de 4<sup>e</sup> génération sont-ils l'avenir du nucléaire ? – IPN de Lyon, 12 avril
- C. Biscarat, J. Stark – La recherche du boson de Higgs et d'autres nouveaux phénomènes au LHC – IPN de Lyon, 13 mai
- R. Bonciani – Top-antitop production at hadron colliders – University of Turin, 24 mai
- R. Bonciani – Top-antitop production at hadron colliders – Universidad Autonoma de Madrid, 22 juin
- R. Bonciani – Top-quark production at hadron colliders – University of Rome, 10 octobre
- A. Barrau – Some aspects of Loop Quantum Cosmology – Université de Genève – Département de Physique Théorique

## Séminaires hebdomadaires de physique

### 2010

- N. Michel (U. de Jyväskylä, Finlande) – Description des états nucléaires peu liés et résonnants avec le Gamow Shell Model
- A. Giammanco (Louvain-la Neuve, Belgium) – Single top at LHC with the CMS detector: an early data strategy
- C. Hernandez Monteagudo (Max-Planck-Institut für Astrophysik) – Cosmology with multifrequency observations of the cosmic microwave background: the WMAP and Planck experiments
- K. Noui (LMPT, Tours) – La gravitation quantique à boucles : principes, résultats et limites
- P. Delahaye (GANIL) – Radioactive ion beams: R&D challenges for future ISOL facilities
- M. Besnier (LLR) – Observation d'un phénomène quantique sur 300 km : l'oscillation des neutrinos avec l'expérience T2K au Japon
- J. Donnard (Subatech, Nantes) – Développement d'un détecteur gazeux pour l'autoradiographie bêta numérique à hautes performances
- J.-P. Luminet (Obs. de Paris-Meudon) – Dernières nouvelles sur la topologie de l'univers
- G. Ross (Oxford) – Testing SUSY
- Y. Mao (LPSC) Photon-hadrons correlation measurements in ALICE/LHC
- A. Gorecki (LPSC) – LSST, de l'instrument aux oscillations acoustiques de baryons
- J. Dumas (LPSC) – Polarization measurement of positrons for CEBAF
- C. Smith (Univ. Karlsruhe) – Minimal flavor violation
- H. Le-Quoc (LPSC) – Couches minces de matériau thermoélectrique type Mg<sub>2</sub>Si<sub>1-x</sub>Sn<sub>x</sub> élaborées par pulvérisation assistée par plasma micro-onde multi-dipolaire
- Y. Perrin (LPSC) – Étude du canal cohérent de la réaction DVCS sur l'hélium
- V. Stolyarov (Cambridge) – Maximum-entropy foreground separation for CMB experiments
- B. Borderie (IPN Orsay) – Condensation Bose-Einstein en physique nucléaire

J. Gomez Quiñones (LPSC) – Design of a CMOS AC Generator Array for Stimulation of Dielectrophoretic/Microfluidic Microdevices

Sylvain Fichet (LPSC) – Du modèle électrofaible aux théories supersymétriques

W. Gillard (LPSC) – Cosmic ray study with the PAMELA space experiment

H. Prosper (Florida State University) – Probability: two hundred years of controversy

P. Brax (SPT, Saclay) – Chameleon cosmology

Fu-Sin Ling (ULB, Belgique) – N-body simulations, dark disks and implications for direct and indirect detection

G. Belanger (LAPth) – Matière noire supersymétrique : le sneutrino

M. Petrarca (University of Rome) – Photoinjector studies at CERN

T. Soldner (ILL) – Precision measurements in neutron decay

## 2011

A. Ferrari (Uppsala University, Sweden) – Charged Higgs boson searches at past, present and future colliders

P.-H. Beauchemin (Oxford University, UK) – Événements monojet : voyage au centre du Modèle Standard et au delà

I. Koletsou (INFN, CERN) – Processus diphoton au LHC

Dr. V. Zorin (Institute of Applied Physics of Russian Academy of Science, Russia) – THz radiation application study at Institute of Applied Physics

J. Lamblin (Subatech, Nantes) – XENON100, à la recherche de la matière noire

A.-M. Magnan (Imperial College, UK) – Paver le chemin vers le Higgs supersymétrique, dans le canal  $bbH$ ,  $H \rightarrow \tau\tau$

R. Poeschl (LAL, Orsay) – Un calorimètre électromagnétique silicium-tungstène à haute granularité pour un futur collisionneur linéaire électrons-positrons

A. Catalano (IAS, ORsay) – Contrôle des effets systématiques avec Planck HFI

M. Cardaci (IPHC, Strasbourg) – Techniques d'estimation de bruits de fond pour les mesures des propriétés du quark top dans le canal dileptonique

E. Chareyre (LPNHE, Paris) – Préparation à la détection des électrons à l'avant du détecteur ATLAS et caractérisation des capteurs à pixels pour la phase sLHC

J. Blaha (LAPP, Annecy) – Hadron calorimetry at a future high energy electron-positron collider

L. Fabbri (INFN, Bologna) – The Weinberg Weak Forces as effects of Cartan Torsion Tensor: how the Standard Model may be included within General Relativity

B. Moreno (Service de Physique Nucléaire, Saclay) – R&D pour le trajectographe MICROMEAS du futur spectromètre CLAS12: études des claquages en champ magnétique intense

F. Spano (Royal Holloway university of London, UK) – Top physics with ATLAS at the LHC

R. Ichou (LPC, Clermont-Ferrand) – Etude de la production de photons isolés en collisions p-p avec le calorimètre EMCal de l'expérience ALICE au LHC

A. Fradi (IPN, Orsay) – Électroproduction exclusive du meson  $\rho^+$  sur le proton à JLAB avec le détecteur CLAS

G. Balbastre (INFN-LNF) – Measurement of photon and neutral mesons and their correlations with charged hadrons in ALICE experience at the LHC

C. Sage (LPSC, Grenoble) – Mesures de données nucléaires sur les actinides d'intérêt pour les cycles actuel U/Pu et innovants Th/U

N. Monseu (LPSC) – Dynamique de spin : Développement d'outils et études pour le collisionneur électron-proton SuperB

I. Fonteille (LPSC) – TraDeRa. Développement d'un détecteur pour le contrôle en ligne et en temps réel des traitements de radiothérapie avec faisceau de photons

J. Billard (LPSC) – Détection directe de matière noire non-baryonique avec le détecteur MIMAC

C. Combet (Leicester, UK) – Dark matter annihilation in the Galaxy: gamma-rays from substructures and dwarf spheroidal galaxies

- T. Frisson (LAL, Orsay) – La recherche pour la radiothérapie
- D. Sokhan (IPN, Orsay) – Mapping the nucleon resonance spectrum – new measurement of beam asymmetry in pion photoproduction from the neutron using CLAS at Jefferson Lab
- M. Regis (university of Torino, Italie) – Radio signals of particle dark matter
- G. Hurier (LPSC) – Extraction de l'effet Sunyaev-Zel'dovich avec l'expérience PLANCK
- T. Cailleteau (LPSC) – Perturbations et théorie quantique de la Gravitation
- T. Delemontex (LPSC) – Mesure de la section efficace de production de quarks top seuls dans le canal dilepton auprès d'ATLAS au LHC
- A. Hoang (MPP Munich, Allemagne) – On the weight of the heaviest known elementary particle
- C. Marinoni (CTP Marseille) – Cosmology with a compass and a straightedge
- B. Coste (LPSC) – Mesure et phénoménologie du rayonnement cosmique
- H-E Thyébault (LPSC) – Expérience GUINEVERE: Validation des techniques dynamiques permettant le suivi en ligne de la réactivité d'un réacteur sous-critique piloté par accélérateur
- D. Hardin (LPNHE, Paris) – Résultats à 3 ans du Supernovae Legacy Survey
- C. Power (Australie) – Probing the physics of galaxy formation with next generation extragalactic neutral hydrogen surveys
- E. Laisné (LPSC) – Recherche de nouveaux bosons de jauge ( $Z'$ ) dans le canal di-électrons auprès du détecteur ATLAS au LHC
- T. Jezo (LPSC) –  $W'$  and  $Z'$  gauge bosons at the LHC
- T. Schwetz (MPI Heidelberg, Allemagne) – Results from Dark Matter direct detection and their interpretation
- D. Vignaud (APC, Paris) – Neutrinos solaires, géoneutrinos: Borexino observe le cœur du Soleil... et de la Terre
- M.-H. Genest (LPSC) – La supersymétrie: résultats de recherche au LHC

## Séminaires du groupe de physique théorique

### 2010

- T. Ohl – Higgsless symmetry breaking: Dark Matter and collider signatures
- A. Villanova del Moral – Minimal SUSY inverse seesaw
- E. Massot – Chiral relativistic description of nuclear matter including effects of confinement
- F. Staub – Introduction to SARAH
- A. Walker-Loud – Low energy hadron structure and interactions from lattice QCD
- L. Dixon – Vector boson + jet production at NLO in QCD
- A. Lessa – Axion/axino dark matter: reconciling thermal leptogenesis with the gravitino problem
- R. Godbole – Top-quark polarisation at colliders
- A. Arbey – Dark matter relic density and early Universe properties
- K.-Y. Oda – Dirichlet Higgs Model
- H. Prosper – Bayesian statistics (follow-up on the colloquium)
- S. Davidson – Of cookbooks and fairy tales: making the matter excess of the Universe with neutrinos
- A. Wingerter – Tribimaximal mixing from small groups

### 2011

- J.-C. Park – Right-handed sneutrino dark matter with  $U(1)_{B-L}$  gauge symmetry
- F. Brümmer – The 4D physics of 5D GUTs
- S. Rajagopalan – Non-thermal production of Dark Matter: heavy axino cosmology
- B. Ananthanarayan – Linear collider physics with polarized beams

- G. Zaharijas – Dark Matter constraints from the Fermi-LAT diffuse gamma-ray data  
D. Chowdhury (Indian Institute of Science, Bangalore, India) – Flavored co-annihilations  
M. Patra – Signals of additional  $Z'$  boson in  $e^+e^-$  to  $W^+W^-$   
A. Deandrea – Superluminal neutrinos in long baseline experiments and SN1987a  
N. Mahmoudi – Implications of flavour, LHC and dark matter data on SUSY  
C. Lorcé (IPN Orsay) – Light-front imaging of composite particles

## Séminaires de la Société Française de Physique

### 2010

- H. Langevin-Joliot – Des usages de la techno science  
L. Duband, L. Miquet – Les basses températures : petites expériences froides dans une ambiance chaleureuse  
D. Raynaud – Carottes de glace et le climat du dernier million d'années  
P. Thomas – Les glaces martiennes  
J. Bricmont – L'esprit post-moderne et le relativisme : la science raconte-t-elle des histoires ?  
D. Raynaud, G. Krinner – Cycle du carbone et climat

### 2011

- A. Aspect – De l'intuition d'Einstein aux bits quantiques : vers une nouvelle révolution quantique ?  
J. Ranninger – La supraconductivité à travers un siècle  
Y. Bréchet – Du matériau par hasard au matériau sur mesure  
R. Taillet – L'apesanteur dans les films de science-fiction  
M. Mayor – D'autres terres dans l'univers ?

# Publications

## Articles publiés dans des revues scientifiques

### Quarks, leptons et symétries fondamentales

#### J. Abdallah et al. Delphi Collaboration

Measurements of the CP-conserving trilinear gauge boson couplings  $WWV$  ( $V = \gamma, Z$ ) in  $e^+e^-$  collisions at LEP2 – Eur. Phys. J. C 66 (2010) 35-56

Study of the dependence of direct photon production on the jet characteristics in hadronic hadronic  $Z^0$  decays – Eur. Phys. J. C 67 (2010) 343-366

A study of the b-quark fragmentation function with the DELPHI detector at LEP I and an averaged distribution obtained at the Z pole – Eur. Phys. J. C 71 (2011)1557

Search for single top quark production via contact interactions at LEP2 – Eur. Phys. J. C 71 (2011) 1555

#### E. Abat et al. ATLAS Collaboration

Study of energy response and resolution of the ATLAS barrel calorimeter to hadrons of energies from 20 to 350 GeV – Nucl. Instrum. Meth. A 621 (2010) 134-150

Combined performance studies for electrons at the 2004 ATLAS combined test-beam – JINST 5 (2010) P11006

Photon reconstruction in the ATLAS Inner Detector and Liquid Argon Barrel Calorimeter at the 2004 Combined Test Beam – JINST 6 (2011) P04001

A layer correlation techniques for pion energy calibration at the 2004 ATLAS combined beam test – JINST 6 (2011) P06001

#### G. Aad et al. ATLAS Collaboration

Charged-particle multiplicities in  $pp$  interactions at  $\sqrt{s} = 900$  GeV measured with the ATLAS detector at the LHC – Phys. Lett. B 688 (2010) 21-42

Performance of the ATLAS detector using first collision data – JHEP 09 (2010 ) 056

Search for new particles in two-jet final states in 7 TeV proton-proton collisions with the ATLAS detector at the LHC – Phys. Rev. Lett. 105 (2010) 161801

Measurement of the  $W \rightarrow l\nu$  and  $Z/\gamma^* \rightarrow ll$  production cross sections in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – JHEP 12 (2010 ) 060

Search for quark contact interactions on dijet angular distributions in  $pp$  collisions at  $\sqrt{s} = 7$  TeV measured with the ATLAS detector – Phys. Lett. B 694 (2011) 327-345

Measurement of inclusive jet and dijet cross sections in proton-proton collisions at 7 TeV centre-of-mass energy with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1512

Measurement of the inclusive isolated prompt photon crosssection in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Rev. D 83 (2011) 052005

Observation of a centrality-dependent dijet asymmetry in lead-lead collisions at  $\sqrt{s}_{NN} = 2.76$  TeV with the ATLAS detector at the LHC – Phys. Rev. Lett. 105 (2010) 252303

Drift time measurement in the ATLAS liquid argon electromagnetic calorimeter using cosmic muons – Eur. Phys. J. C 70 (2010) 755-785

Readiness of the ATLAS liquid argon calorimeter for LHC Collisions – Eur. Phys. J. C 70 (2010) 723-753

The ATLAS inner detector commissioning and calibration – Eur. Phys. J. C 70 (2010) 787-821

The ATLAS simulation infrastructure – Eur. Phys. J. C 70 (2010) 823-874

Commissioning of the ATLAS muon spectrometer with cosmic rays – Eur. Phys. J. C 70 (2010) 875-916

Readiness of the ATLAS tile calorimeter for LHC collisions – Eur. Phys. J. C 70 (2010) 1193-1236

Studies of the performance of the ATLAS detector using cosmic-ray muons – Eur. Phys. J. C 71 (2010) 1593

- Measurement of the centrality dependence of  $J/\psi$  yields and observation of  $Z$  production in lead-lead collisions with the ATLAS detector at the LHC – Phys. Lett. B 697 (2011) 294-312
- Study of jet shapes in inclusive jet production in  $pp$  collisions at  $\sqrt{s} = 7$  TeV using the ATLAS detector – Phys. Rev. D 83 (2011) 052003
- Search for diphoton events with large missing transverse energy in 7 TeV proton-proton collisions with the ATLAS detector – Phys. Rev. Lett. 106 (2011) 121803
- Search for supersymmetry using final states with one lepton, jets, and missing transverse momentum with the ATLAS detector in  $\sqrt{s} = 7$  TeV  $pp$  collisions – Phys. Rev. Lett. 106 (2011) 131802
- Measurement of the production cross section for  $W$ -bosons in association with jets in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 698 (2011) 325-345
- Search for a massive long-lived highly ionizing particles with the ATLAS detector at the LHC – Phys. Lett. B 698 (2011) 353-370
- Measurement of dijet azimuthal decorrelations in  $pp$  collisions at  $\sqrt{s} = 7$  TeV – Phys. Rev. Lett. 106 (2011) 172002
- Charged-particle multiplicities in  $pp$  interactions measured with the ATLAS detector at the LHC – New J. Phys. 13 (2011) 053033
- Search for new physics in dijet mass and angular distributions in collisions at  $\sqrt{s} = 7$  TeV measured with the ATLAS detector – New J. Phys. 13 (2011) 053044
- Measurements of underlying-event properties using neutral and charged particles in  $pp$  collisions at  $\sqrt{s} = 900$  GeV and  $\sqrt{s} = 7$  TeV with the ATLAS detector at the LHC – Eur. Phys. J. C 71 (2011) 1636
- Search for high mass dilepton resonances in collisions at  $\sqrt{s} = 7$  TeV with the ATLAS experiment – Phys. Lett. B 700 (2011) 163-180
- Measurement of underlying event characteristics using charged particles in collisions at  $\sqrt{s} = 900$  GeV and  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Rev. D 83 (2011) 112001
- Search for pair production of first or second generation leptoquarks in proton-proton collisions at  $\sqrt{s} = 7$  TeV using the ATLAS detector at the LHC – Phys. Rev. D 83 (2011) 112006
- Measurement of the differential cross-sections of inclusive, prompt and non-prompt  $J/\psi$  production in proton-proton collisions at  $\sqrt{s} = 7$  TeV – Nucl. Phys. B 850 (2011) 387-444
- Search for a heavy particle decaying into an electron and a muon with the ATLAS detector in  $\sqrt{s} = 7$  TeV  $pp$  collisions at the LHC – Phys. Rev. Lett. 106 (2011) 251801
- Search for high-mass states with one lepton plus missing transverse momentum in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 701 (2011) 50-69
- Search for stable hadronising squarks and gluinos with the ATLAS experiment at the LHC – Phys. Lett. B 701 (2011) 1-19
- Measurement of the  $W$  charge asymmetry in the  $W \rightarrow \mu\nu$  decay mode in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 701 (2011) 31-49
- Search for squarks and gluinos using final states with jets and missing transverse momentum with the ATLAS detector in  $\sqrt{s} = 7$  TeV proton-proton collisions LHC – Phys. Lett. B 701 (2011) 186-203
- Search for supersymmetry in  $pp$  collisions at  $\sqrt{s} = 7$  TeV in final states with missing transverse momentum and b-jets – Phys. Lett. B 701 (2011) 398-416
- Search for supersymmetric particles in events with lepton pairs and large missing transverse momentum in  $\sqrt{s} = 7$  TeV proton-proton collisions with the ATLAS experiment LHC – Eur. Phys. J. C 71 (2011) 1682 Search for an excess of events with an identical flavour lepton pair and significant missing transverse momentum in  $\sqrt{s} = 7$  TeV proton-proton collisions with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1647
- Search for contact interactions in dimuon events from  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS Detector – Phys. Rev. D 84 (2011) 011101(R)
- Measurement of the  $W^+W^-$  cross section in  $\sqrt{s} = 7$  TeV  $pp$  collisions with ATLAS – Phys. Rev. Lett. 107 (2011) 041802
- Search for heavy long-lived charged particles with the ATLAS detector in collisions at  $\sqrt{s} = 7$  TeV – Phys. Lett. B 703 (2011) 428-446

- Measurement of the inelastic proton–proton cross-section at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Nature Communications 2 (2011) 463
- Search for diphoton events with large missing transverse energy with  $36 \text{ pb}^{-1}$  of 7 TeV proton-proton collision data with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1744
- Measurement of multi-jet cross sections in proton-proton collisions at a 7 TeV center-of-mass energy – Eur. Phys. J. C 71 (2011) 1763
- Measurement of the  $Y(1S)$  production cross-section in  $pp$  collisions at  $\sqrt{s} = 7$  TeV in ATLAS – Phys. Lett. B 705 (2011) 9-27
- Measurement of the transverse momentum distribution of  $Z/\gamma^*$  bosons in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 705 (2011) 415-434
- Measurement of  $W\gamma$  and  $Z\gamma$  production in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the ATLAS Detector – JHEP 09 (2011) 072
- Inclusive search for same-sign dilepton signatures in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – JHEP 10 (2011) 107
- Performance of the ATLAS Trigger System in 2010 – Eur. Phys. J. C 72 (2011) 1849
- Measurement of the top quark-pair production cross section with ATLAS in  $pp$  collisions at  $\sqrt{s} = 7$  TeV – Eur. Phys. J. C 71 (2011) 1577
- Luminosity determination in  $pp$  collision at  $\sqrt{s} = 7$  TeV using the ATLAS detector at the LHC – Eur. Phys. J. C 71 (2011) 1630
- Properties of jets measured from tracks in proton-proton collisions at center-of-mass energy  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Rev. D 84 (2011) 054001
- Limits on the production of the Standard Model Higgs Boson in collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1728
- Search for the Standard Model Higgs boson in the two photon decay channel with the ATLAS detector at the LHC – Phys. Lett. B 705 (2011) 452-470
- Search for new phenomena with the monojet and missing transverse momentum signature using the ATLAS detector in  $\sqrt{s} = 7$  TeV proton-proton collisions – Phys. Lett. B 705 (2011) 294-312
- Search for neutral MSSM Higgs bosons decaying to  $\tau^+\tau^-$  pairs in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 705 (2011) 174-192
- Measurement of the inclusive isolated prompt photon cross-section in  $pp$  collisions at  $\sqrt{s} = 7$  TeV using  $35 \text{ pb}^{-1}$  of ATLAS data – Phys. Lett. B 706 (2011) 150-167
- Measurement of the  $Z \rightarrow \tau\tau$  cross section with the ATLAS detector – Phys. Rev. D 84 (2011) 112006
- Measurement of dijet production with a veto on additional central jet activity in  $pp$  collisions at  $\sqrt{s} = 7$  TeV using the ATLAS detector – JHEP 09 (2011) 053
- Performance of missing transverse momentum reconstruction in proton-proton collisions at  $\sqrt{s} = 7$  TeV with ATLAS – Eur. Phys. J. C 72 (2011) 1844
- Search for the Standard Model Higgs boson in the decay channel  $H \rightarrow ZZ^{(*)} \rightarrow 4l$  with the ATLAS detector – Phys. Lett. B 705 (2011) 435-451
- Search for a Standard Model Higgs boson in the  $H \rightarrow ZZ \rightarrow l^+l^- \nu\bar{\nu}$  decay channel with the ATLAS detector – Phys. Rev. Lett. 107 (2011) 221802
- Search for the Higgs boson in the  $H \rightarrow WW \rightarrow l\nu jj$  decay channel in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Rev. Lett. 107 (2011) 231801
- Measurement of the jet fragmentation function and transverse profile in proton-proton collisions at a center-of-mass energy of 7 TeV with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1795
- Search for a heavy gauge boson decaying to a charged lepton and a neutrino in  $1 \text{ fb}^{-1}$  of collisions at  $\sqrt{s} = 7$  TeV using the ATLAS detector – Phys. Lett. B 705 (2011) 28-46
- Search for a heavy neutral particle decaying into an electron and a muon using  $1 \text{ fb}^{-1}$  of ATLAS data – Eur. Phys. J. C 71 (2011) 1809
- Search for massive colored scalars in four-jet final states in  $\sqrt{s} = 7$  TeV proton-proton collisions with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1828



Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using  $\sqrt{s} = 7$  TeV  $pp$  collisions with the ATLAS detector – JHEP 11 (2011) 099

### H. Abreu et al.

Performance of the electronic readout of the ATLAS liquid argon calorimeter – JINST 5 (2010) P09003

Search for dilepton resonances in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Rev. Lett. 107 (2011) 272002

Measurement of the inclusive and dijet cross-sections of b-jets in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Eur. Phys. J. C 71 (2011) 1846

Measurement of the cross-section for b-jets produced in association with a Z boson at  $\sqrt{s} = 7$  TeV with the ATLAS detector – Phys. Lett. B 706 (2011) 295-313

### V.M. Abazov et al. D0 Collaboration

Search for CP violation in  $B_S^0 \rightarrow \mu^+ D_S^- X$  decays in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV – Phys. Rev. D. 82 (2010) 012003

Measurement of the t-channel single top quark production cross section – Phys. Lett. B 682 (2010) 363-369

Measurement of  $Z/\gamma^* + \text{jet} + X$  angular distributions in  $p\bar{p}$  collision at  $\sqrt{s} = 1.96$  TeV – Phys. Lett. B 682 (2010) 370-380

Search for a resonance decaying into  $WZ$  boson pairs in  $p\bar{p}$  collisions – Phys. Rev. Lett. 104 (2010) 061801

Search for Higgs boson production in dilepton and missing energy final states with  $5.4 \text{ fb}^{-1}$  of  $p\bar{p}$  collision at  $\sqrt{s} = 1.96$  TeV – Phys. Rev. Lett. 104 (2010) 061804

Search for the standard model Higgs boson in the  $ZH \rightarrow \nu\bar{\nu}b\bar{b}$  channel in  $5.2 \text{ fb}^{-1}$  of  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV – Phys. Rev. Lett. 104 (2010) 071801

Double parton interactions in  $\gamma+3$  jet events in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV – Phys. Rev. D 81 (2010) 052012

Search for the associated production of a quark and a neutral supersymmetric Higgs boson which decays to tau pairs – Phys. Rev. Lett. 104 (2010) 151801

Search for single top quarks in the tau+jets channel using  $4.8 \text{ fb}^{-1}$  of  $p\bar{p}$  collision data – Phys. Lett. B 690 (2010) 5-14

Measurement of direct photon pair production cross sections in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV – Phys. Lett. B 690 (2010) 108-117

Search for Randall-Sundrum gravitons in the dielectron and diphoton final states with  $5.4 \text{ fb}^{-1}$  of data from  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV – Phys. Rev. Lett. 104 (2010) 241802

b-Jet identification in the D0 experiment – Nucl. Instrum. Meth. A 620 (2010) 490-517

Evidence for an anomalous like-sign dimuon charge asymmetry – Phys. Rev. D 82 (2010) 032001

Evidence for an anomalous like-sign dimuon charge asymmetry – Phys. Rev. Lett. 105 (2010) 081801

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## Pôle accélérateurs et sources d'ions

R. Barlow et al. – EMMA- The world's first non-scaling FFAG – Nucl. Instrum. Meth. A 624 (2010) 1-19

P. Delahaye et al. – Evaluation of charge breeding options for EURISOL – Eur. Phys. J. A 46 (2010) 421-433

## Interdisciplinaire

A. Monfardini et al. – The new NIKA: A dual-band millimeter-wave kinetic inductance camera for the IRAM 30-meter telescope – The Astrophysical Journal Supplement Series 194 (2011) 24

**O. Bourrion** et al. – Electronics and data acquisition demonstrator for a kinetic inductance camera – JINST 6 (2011) P06012

**O. Bourrion** et al. – UCTM: a User friendly Configurable Trigger, scaler and delay module for nuclear and particle physics – Nucl. Instrum. Meth. A 665 (2011) 48-53

## Plasmas – Matériaux – Nanostructures

**H. Le-Quoc** et al. – Thin films of thermoelectric compound  $Mg_2Sn$  deposited by co-sputtering assisted by multi-dipolar microwave plasma – J. Alloy Compd. 509 (2011) 9906-9911

## Publications dans des revues non répertoriées dans les bases de données, sans comité de lecture, de vulgarisation...

**F. Malek** – Le calcul scientifique des expériences LHC. Une grille de production mondiale – Reflets de la Physique 20 (2010) 11-15

**A. Barrau, L. Derome** – Un détecteur de particules dans l'espace – La Recherche 450 (2011) 46-48

**A. Barrau, F. Vidotto** – Cosmologie quantique – L'Astronomie 36 (2011) 16-22

**F. Malek** – L'école de physique avancée au Maghreb 2011 – Reflets de la Physique 26 (2011) 29

**A. Barrau, J. Grain** – Coïncidence cosmologique – Ciel&Espace 18H (2011) 50-51

**A. Barrau, F. Vidotto** – De l'autre côté du Big-Bang – La Recherche 458 (2011) 46-49

## Analyse des publications et taux de citations

Les données sont issues de la base Web of Knowledge (Web of Science, ISI).

### Pour la période 1900-2011

Nombre de publications du laboratoire: 3077

Taux de citation moyen par article: 16,36

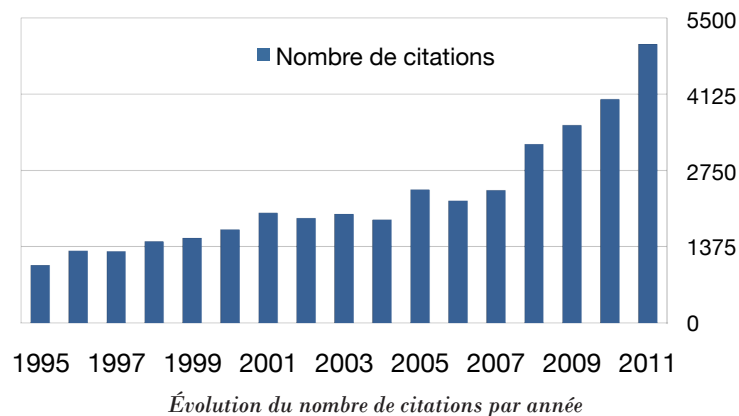
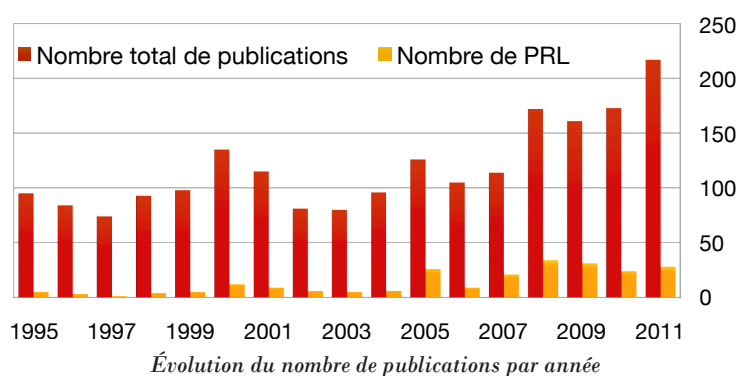
h-index: 81 (02/2012)

### Pour l'année 2007

Nombre de publications du laboratoire: 122 (01/2012)

Taux de citation moyen par article: 18,63 (01/2012)

h-index: 79 (01/2012), 61 (01/2008)



## Conférences données à l'invitation du comité d'organisation dans un congrès national ou international

### Quarks, leptons et symétries fondamentales

#### ATLAS-ILC-D0

Challenges for Precision Physics at the LHC, LPNHE, Paris, France, 15 - 18 December 2010

**J. Stark** – W/Z physics in D0

École de Physique Avancée au Maghreb 2011 «Hautes Énergies – Cosmologie et Astroparticules – Instrumentation associée», Taza, Maroc, 26 mars - 3 avril 2011

**J. Collot** – Analyse de données

**J. Collot** – Détection de particules

École IN2P3 – Pays Méditerranéens des Accélérateurs de Particules, Gammarth, Tunisie, 9 - 14 mai 2011

**F. Malek** – Application des accélérateurs en physique des particules : exemple du LHC

#### AMS-CREAM-LSST

IN2P3 School of Statistics 2010, Autrans, France, 17-21 May 2010

**L. Derome** – Markov chain Monte Carlo

Cosmic Rays & their Interstellar Medium Environment (CRISM-2011), Montpellier, France, 26 June - 1 July 2011

**L. Derome** – Direct detection of cosmic rays – Proc. à paraître (memoria della societa italiana)

#### AUGER-CODALEMA

XXX International Symposium on Physics in Collision (PIC2010), Karlsruhe, Germany, 1 - 4 September 2010

**F. Montanet** – Ultra high energy cosmics

École de Physique Avancée au Maghreb 2011 «Hautes Énergies – Cosmologie et Astroparticules – Instrumentation associée», Taza, Maroc, 26 mars - 3 avril 2011

C. Bérat, C. Renault – Particules cosmiques

#### PLANCK-MIMAC

École de Physique Avancée au Maghreb 2011 «Hautes Énergies – Cosmologie et Astroparticules – Instrumentation associée», Taza, Maroc, 26 mars - 3 avril 2011

D. Hardin, C. Renault – Cosmologie

### Physique des réacteurs

IN2P3 School of Statistics 2010, Autrans, France, 17 - 21 May 2010

**G. Kessedjian** – Fondamental concepts

Rencontres de Physique de l'Infiniment Grand à l'Infiniment Petit 2011, Orsay, France, 18 - 29 July 2011

**A. Bidaud** – Maîtriser l'énergie de l'atome

### Théorie et phénoménologie

XVII Vietnam School of Physics (VSOP), Hue, Vietnam, 18 - 24 July 2011

**S. Kraml** – Beyond the standard model

### Pôle accélérateurs et sources d'ions

1st International Workshop on Accelerator-Driven Sub-critical Systems & Thorium Utilization, Blacksburg, Virginia, USA, September 27 - 29 2010

**M. Baylac** et al Guinevere collaboration – Some highlights of exeperimental ADS programs in Europe

Joint Universities Accelerator School (JUAS 2011), Archamps, France, 3 January - 11 March 2011

**T. Thuiller** – Particle Sources

8<sup>th</sup> International Workshop “Strong Microwaves and Terahertz Waves: Sources and Applications”, Nizhny Novgorod, Russia, 9 - 16 July 2011

**T. Lamy** et al. – An ECR ion source with a high power – high frequency gyrotron, the 60 GHz “SEISM” project – Proc. of the 8<sup>th</sup> International Workshop “Strong Microwaves and Terahertz Waves: Sources and Applications” Russian Academy of Sciences Institut of Applied Physics p. 281

## Interdisciplinaire

École de Physique Avancée au Maghreb 2011 «Hautes Énergies – Cosmologie et Astroparticules – Instrumentation associée», Taza, Maroc, 26 mars - 3 avril 2011

**Y. Arnoud** – La simulation avec Geant 4 en biologie

**Y. Arnoud** – Interfaces physique médecine/imagerie médicale/TEP

Services Techniques – développements technologiques

Rencontres de Physique de l’Infiniment Grand à l’Infiniment Petit 2011, Orsay, France, 18 - 29 juillet 2011

**C. Biscarat** – Enregistrer et analyser pour découvrir

## Communication avec actes dans un congrès international

### Quarks, leptons et symétries fondamentales

#### ATLAS-ILC

International Linear Collider Workshop 2010 (LCWS10 & ILC10), Beijing, China, 26 - 30 March 2010

D. Benchekroun et al. – Measurement of the Higgs mass via the channel (preliminary results) – Proc. à paraître

XVIII International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Firenze, Italy, 19 - 23 April 2010

**J. Donini** – Top rediscovery at the LHC (CMS+ATLAS) – PoS (DIS2010) 154

35<sup>th</sup> International Conference on High Energy Physics (ICHEP), Paris, France, 22 - 28 July 2010

**A. Lucotte** – Top quark studies with ATLAS – Proc. à paraître (PoS)

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**F. Polci** – Measurement of isolated prompt photons in pp collisions with the ATLAS detector – Proc. à paraître (Proceedings of Science)

M. Verzocchi, **H. Li** – Measurement of the properties of Electroweak bosons with the D0 detector – Proc. à paraître (Proceedings of Science)

XXV International Symposium on Lepton Photon Interactions at High Energies (Lepton Photon 2011), Mumbai, India, 22 - 27 August 2011

**J. Stark** – Precision electroweak measurements at colliders – Proc. à paraître

Hadron Collider Physics Symposium 2011 (HCP 2011), Paris, France, 14 - 18 novembre 2011

**B. Trocmé** – V+jets results @ ATLAS+CMS – Proc. à paraître

#### UCN

Workshop GRANIT 2010, École de Physique des Houches, Les Houches, France, 14 - 19 février 2010

I. Antoniadis et al. – Ultra cold neutron quantum states / États quantiques des neutrons ultra froids. Workshop GRANIT-2010, 14 - 19 February 2010, Les Houches, France – CR. Phys. 12 (2011) 703-706

S. Baessler et al. – The GRANIT spectrometer. Le spectromètre GRANIT – CR. Phys. 12 (2011) 707-728

S. Baessler et al. – New methodical developments for GRANIT. Nouveaux développements méthodologiques pour GRANIT – CR. Phys. 12 (2011) 729-754

I. Antoniadis et al. – Short-range fundamental forces. Forces fondamentales à courte portée – CR. Phys. 12 (2011) 755-778

5<sup>th</sup> Meeting on CPT and Lorentz Symmetry, Bloomington, Indiana, U.S., 28 June - 2 July 2010

**D. Rebreyend** – Search for light-speed anisotropies using Compton scattering of high-energy electrons – CPT and Lorentz Symmetry. Proc. of the Fifth Meeting, Indiana University, Bloomington, USA, 28 June - 2 July 2010, V.A.Kostelecký (ed.), World Scientific (2011) p. 35, ISBN 9789814327671

**I. Altarev** et al. – Tests of Lorentz invariance using a spectrometer dedicated to the neutron electric dipole moment (nEDM) search – CPT and Lorentz Symmetry. Proc. of the Fifth Meeting, Indiana University, Bloomington, USA, 28 June - 2 July 2010, V.A.Kostelecký (ed.), World Scientific (2011) 189-193, ISBN 9789814327671

8<sup>th</sup> International Workshop on Polarised Neutrons in Condensed Matter Investigations (PNCMI2010), Delft, Netherlands, 5 - 8 July 2010

I. Altarev et al. – Testing isotropy of the universe using the Ramsey resonance technique on ultracold neutron spins electrons – Physica B 406 (2011) 2365-2369

5<sup>th</sup> European Conference on Neutron Scattering (ECNS 2011), Prague, Czech Republic, 17 - 22 July 2011

**F.M. Piegsa, G. Pignol** – A proposed search for new light bosons using a table-top neutron Ramsey apparatus

Physics of Fundamental Symmetries and Interactions (PSI2010), Paul Scherrer Institut, Villigen, Switzerland, 11 - 14 October 2010



C.A Baker et al. – The search for the neutron electric dipole moment at the Paul Scherrer Institute – Physics Procedia 17 (2011) 159-167.

K. Bodek et al. – MC calculations for the nEDM experiment systematics – Physics Procedia 17 (2011) 259-267

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**D. Rebreyend** – The GRANIT project: status and perspectives – Proc. à paraître (Proceedings of Science)

Meeting of the Division of Particles and Fields of the American Physical Society (DPF-2011), Providence, Rhode Island, USA, 9 - 13 August 2011

M. Burghoff et al. – An improved search for the neutron electric dipole moment – Proc. On line à paraître (SLAC)

## **DO**

International Linear Collider Workshop 2010 (LCWS10 & ILC10), Beijing, China, 26 - 30 March 2010

**H. Li** – Higgs recoil mass and Higgs-strahlung cross-section study for the ILD LOI and beyond – Proc. à paraître

**H. Li** – Impacts of SB2009 on the Higgs recoil mass measurement based on a fast simulation algorithm for the ILD detector – Proc. à paraître

Physics at LHC 2011, Perugia, Italy, 6 - 11 June 2011

**G. Sajot** – Tevatron BSM results – Proc. à paraître

## **Astroparticules et Cosmologie**

### **AMS-CREAM-LSST**

Observatory Operations: Strategies, Processes, and Systems III, San Diego, California, United States, 30 June - 2 July 2010

D. L. Burke et al. – Calibration of the LSST instrumental and atmospheric photometric passbands – Proc. SPIE 7737 (2010) 77371D

22<sup>nd</sup> Rencontres de Blois Particle Physics and Cosmology First Results from the LHC, Blois, France, 15 - 20 juillet 2010

**A. Gorecki** et al. – Baryonic acoustic oscillations simulations for the large synoptic survey telescope (LSST)

35<sup>th</sup> International Conference on High Energy Physics (ICHEP), Paris, France, 22 - 28 juillet 2010

**A. Barrau** – Inflation and loop quantum cosmology – PoS (ICHEP2010) 461

ICATPP Conference on Cosmic Rays for Particle and Astroparticle Physics, Como, Italy, 7 - 8 October 2010

**D. Maurin** – USINE: a new public cosmic-ray propagation code code (Basic Phenomenology, Sample Results, and a Bit of USINE) – Cosmic Rays for Particle and Astroparticle Physics Proceedings of the 12<sup>th</sup> ICATPP Conference World Scientific (2011) ISBN 978-981-4329-02-6

Loops 11, Madrid, Spain, 23 - 28 May 2011

**A. Barrau** et al. – Some phenomenological aspects of Loop Quantum Cosmology – Proc. à paraître (J. of phys. Conf. Series)

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**A. Barrau** – Loop quantum cosmology – Proc. à paraître (Proceedings of Science) – Proc. à paraître (Proceedings of Science)

**A. Gorecki** – Probing dark energy with the Large Synoptic Survey Telescope (LSST) – Proc. à paraître (Proceedings of Science)

32<sup>nd</sup> International Cosmic Ray Conference (ICRC2011), Beijing, China, 11 - 18 August 2011

**B. Coste** – Constraints on cosmic-ray propagation and acceleration models from light nuclei – Proc. à paraître (CDROM)

**W. Gillard** – Isotopic identification for space experiment with the geomagnetic field – Proc. à paraître (CDROM)

### **AUGER-CODALEMA**

4<sup>th</sup> International Workshop on Acoustic and Radio EeV Neutrino Detection Activities (ARENA 2010), 29 June- 2 July 2010, Nantes, France

**C. Rivière** et al. – Radio emission modelization – Observables and interpretation – Nucl. Instrum. Meth. A 662 (2012) S191-S195

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**C. Bérat** – Measurement of the cosmic ray energy spectrum above 1 EeV at the Pierre Auger Observatory – Proc. à paraître (Proceedings of Science)

International Conference on Particle Physics and Cosmology (COSMO 11), Porto, Portugal, 22 - 26 August 2011

**A. Gorecki** – BAO simulation dedicated to the large synoptic survey telescope – Proc. à paraître (CD)

### PLANCK-MIMAC

The XLV<sup>th</sup> Rencontres de Moriond ElectroWeak Interactions and Unified Theories 2010, La Thuile, Italy, 6 - 13 March 2010

**J. Billard** et al. – Directional detection of dark matter – Proc. of the XLV<sup>th</sup> Rencontres de Moriond. 2010 Electroweak Interactions and unified Theories, La Thuile, Aosta Valley, Italy, 6 - 13 March 2010 - E. Augé et al. (ed.) - The GIOI publishers (2010) p. 537

The XLV<sup>th</sup> Rencontres de Moriond Cosmology 2010, La Thuile, Italy, 13 - 20 March 2010

**L. Fauvet, J.F. Macias-Perez** – Preparation of the CMB Planck analysis: contamination due to the galactic emission – Proc. of the XLV<sup>th</sup> Rencontres de Moriond 2010 Cosmology, La Thuile, Aosta Valley, Italy, 13 - 20 March 2010, E. Augé et al. (ed.) The GIOI Publishers (2010) 73-76

**D. Girard** – Planck-HFI time ordered data analysis – Proc. of the XLV<sup>th</sup> Rencontres de Moriond 2010 Cosmology, La Thuile, Aosta Valley, Italy, 13 - 20 March 2010, E. Augé et al. (ed.) The GIOI Publishers (2010) 339-340

Ground-based and Airborne Instrumentation for Astronomy III, San Diego, California, United States, 27 June - 2 July 2010

L. Labadie et al. – High spatial resolution and high contrast optical speckle imaging with FASTCAM at the ORM – Proc. SPIE 7735 (2010) 77350X

22<sup>nd</sup> Rencontres de Blois Particle Physics and Cosmology First Results from the LHC, Blois, France, 15 - 20 July 2010

**C. Grignon** et al. – Directional detection of non-baryonic dark matter with MIMAC

8<sup>th</sup> International Workshop on Identification of Dark Matter (IDM 2010), Montpellier, France, 26 - 30 juillet 2010

**J. Billard** et al. – Identification of dark matter with directional detection – Proc. of Science PoS(IDM2010) 071

**D. Santos** et al. – MIMAC: a micro-tpc matrix for directional detection of dark matter – Proc. of Science PoS (IDM2010) 041

5<sup>th</sup> Symposium on large TPCs for Low Energy Rare Event Detection and Workshop on Neutrinos from Supernovae, Paris, France, 14 - 17 December 2010

**J. Billard** et al. – Directional detection of dark matter with MIMAC: WIMP identification and track reconstruction – Proc. à paraître (Journal of Physics: Conference Series) – J. of phys. Conf. Series 309 (2011) 012015

**D. Santos** et al. – MIMAC: a micro-TPC matrix for directional detection of dark matter reconstruction – J. of phys. Conf. Series 309 (2011) 012014

3<sup>rd</sup> Workshop on Directional Detection of Dark Matter (CYGNUS 2011), Aussois, France, 7-10 juin 2011

**F. Mayet** et al. – Directional detection of Dark Matter – Proc. à paraître (EDP Sciences)

**D. Santos** et al. – MIMAC: a Micro-TPC Matrix for directional detection of Dark Matter – Proc. à paraître (EDP Sciences)

**J. Billard** et al. – Exclusion, discovery and identification of dark matter with directional detection – Proc. à paraître (EDP Sciences)

**O. Guillaudin** et al. Quenching factor measurement in low pressure gas detector for directional dark matter search

C. Golabek et al. – Production and measurement of neutron reference fields: the amande facility and MIMAC prototype as neutron detection system, – Proc. à paraître (EDP Sciences)

**O. Bourrion** et al. – Dedicated front-end and readout electronics developments for real time 3D directional detection with MIMAC – Proc. à paraître (EDP Sciences)

**J. Billard** et al. – Track reconstruction with MIMAC – Proc. à paraître (EDP Sciences)

**E. Ferrer-Ribas** et al. – Micromegas detector developments for MIMAC

Technology and Instrumentation in Particle Physics 2011 (TIPP 2011), Chicago, Illinois, USA, 9 - 14 June 2011

I. Gutierrez et al. – The discrimination capabilities of Micromegas detectors at low energies – Proc. à paraître (Physics Procedia)

11<sup>th</sup> International Conference on Applications of Nuclear Techniques (CRETE 2011), Crete, Greece, 12 - 18 June 2011

C. Gobalek et al. – Characterization of monoenergetic low energy neutron fields with the  $\mu$ TPC detector – AIP Conf. Proc. 1412 (2011) 192-199

A new Era for SZ Science (SZ2011), Santander, Spain, 27 - 30 June 2011

G. Hurier – SZ reconstruction with the MILCA algorithm – Proc. à paraître

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

G. Hurier – The thermal Sunyaev-Zel'dovich effect with PLANCK – Proc. à paraître (Proceedings of Science)

12<sup>th</sup> International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011), Munich, Germany, 5 - 9 September 2011

J. Billard et al. – Directional detection of Dark Matter with MIMAC – Proc. à paraître (Journal of Physics: Conference Series)

Topical Workshop on Electronics for Particle physics (TWEPP-11), Vienna, Austria, 26 - 30 September 2011

O. Bourrion et al. – Data acquisition electronics and reconstruction software for real time 3D track reconstruction within the MIMAC project – JINST 6 (2011) C11003

## Physique hadronique et Matière nucléaire

### GRAAL

12<sup>th</sup> International Conference on Meson-Nucleon Physics and the Structure of the Nucleon (MENU 2010), Williamsburg, Virginia, USA, 31 May - 4 June 2010

A. D'Angelo et al. – Complete photo-production experiments – AIP Conf. Proc. 1374 (2011) 17-22

### ALICE-JLAB

XIV International Conference on Calorimetry in High Energy Physics (CALOR 2010), Beijing, China, 10 - 14 May 2010

J. Faivre for the ALICE collaboration – Relative pre-calibration of the ALICE electromagnetic calorimeter EMCAL – Journal of Physics: Conference Series 293 (2011) 012046

Hot Quarks 2010 (HQ'10), La Londe-les-Maures, France, 21 - 26 juin 2010

Y. Mao for the CALICE collaboration – Two particle correlations: a probe of the LHC QCD medium – Journal of Physics: Conference Series 270 (2011) 012032

International Nuclear Physics Conference (INPC), Vancouver, Canada, 4 - 9 July 2010

M. Versteegen – Final results of the G0 experiment: strange quark contributions to the nucleon form factors in parity-violating electron scattering – Proc. à Paraître (Journal of Physics: Conference Series (JPCS))

International Workshop on Interplay between Soft and Hard Interactions in Particle Production at Ultra-Relativistic Energies (WISH2010), Catania, Italy, September 8-10 2010

G. Conesa Balbastre – Performance of the ALICE electromagnetic calorimeters for the first year data taking at LHC – Proc. à Paraître (Il Nuovo Cimento C)

XIX International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2011), Newport News, VA, USA, 11 - 15 April 2011

Y. Perrin – Coherent deeply virtual Compton scattering off helium (CLAS) – Proc. à Paraître (AIP)

Quark Matter 2011 (QM2011), Annecy, France, 22 - 28 May 2011

C. Silvestre – Quarkonia measurements by the CMS experiment in pp and PbPb collisions – J. Phys. G: Nucl. Part. Phys. 38 (2011) 124033

Y. Mao – A comprehensive study of the high-pt particle correlations in pp collisions at LHC/ALICE ALICE – J. Phys. G: Nucl. Part. Phys. 38 (2011) 124094

G. Conesa-Balbastre – Suppression of neutral pion production at large transverse momentum measured with the ALICE experiment in Pb-Pb collisions at  $\sqrt{s} = 2.76$  TeV – J. Phys. G: Nucl. Part. Phys. 38 (2011) 124117

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**C. Silvestre** – Quarkonia measurements by the CMS experiment in PbPb collisions – Proc. à paraître (Proceedings of Science)

## Structure Nucléaire

10<sup>th</sup> International Spring Seminar on Nuclear Physics New Quests in Nuclear Structure, Vietri Sul Mare, Italy, 21 - 25 May 2010

**G. Simpson** et al. –  $19/2^+$  isomer of  $^{125}\text{Cd}$  and realistic shell-model calculations of neutron-rich Cd isotopes – Journal of Physics: Conference Series 267 (2011) 012031

Advances in Radioactive Isotope Science (ARIS 2011), Leuven, France, 29 May - 3 June 2011

G. Gorgiev et al. – Coulomb excitation of odd-A neutron-rich Rb isotopes at REX-ISOLDE. Nuclear structure studies at the r-process path

XXXII Mazurian Lakes Conference on Physics. Legacy of Maria Skłodowska-Curie – 100 years after discovery of atomic nucleus, Piaski, Poland, 11 - 18 September 2011

**T. Malkiewicz** – Recent studies of odd-A, neutron-rich lanthanide nuclei – Proc. à paraître (Acta Physica Polonica)

## Physique des réacteurs

International Conference on Nuclear Data for Science and Technology (ND2010), Jeju Island, Korea, 26 - 30 April 2010

**A. Bidaud** – Thorium molten salt fast reactor nuclear data uncertainty analysis – Proc. à paraître

Measurements and Models of Nuclear Reactions (EFNUDAT), Paris, France, 25 - 27 May 2010

**G. Kessedjian** et al. –  $^7\text{Li}$  neutron-induced elastic scattering cross section measurement using slowing-down spectrometer – EPJ Web of Conf. 8 (2010) 07005

European Nuclear Conference (ENC 2010), Barcelona, Spain, 30 May - 2 June 2010

**E. Merle-Lucotte** et al. – Simulation tools and new developments of the Molten Salt Fast Reactor – Proc. on line ENC 2010 Transactions ISBN 9789295064096 5p.

**P. Baeten** et al. – The Guinevere project at the VENUS-F Facility – Proc. on line ENC 2010 Transactions ISBN 9789295064096 5p.

36<sup>a</sup> Reunion Annual de la Sociedad Nuclear Espanola (SNE'10), Santiago de Compostela, Espana, October 6-8 2010

**H. Boussier, D. Heuer** – Estudio de sistema de un proceso de tratamiento-reciclado piroquímico del combustible de un reactor de sales fundidas – Proc. on line

2011 International Congress on Advances in Nuclear Power Plants (ICAPP 2011), Nice, France, 2 - 5 May 2011

**E. Merle-Lucotte** et al. – Launching the thorium fuel cycle with the Molten Salt Fast Reactor – Proc. on CD Rom paper 11190 842-851

**A.-A. Zakari** et al. – Interdisciplinary prospective analysis of nuclear power technological transition – Proc. on CD Rom paper 11260 2618-2625

2<sup>nd</sup> International Conference on Advancements in Nuclear Instrumentation, Measurement Methods and their Applications (ANIMMA2011), Ghent, Belgium, 6 - 9 June 2011

**E. Martin** et al. – Measurements of the mass and isotopic yields of the  $^{233}\text{U}(n,f)$  and  $^{241}\text{Pu}(n,f)$  reactions at the Lohengrin spectrometer – Proc. à paraître (IEEE)

3<sup>rd</sup> International Workshop on Compound Nuclear Reactions and Related Topics (CNR 11), Prague, Czech Republic, 19 - 23 September 2011

**G. Boutoux** et al. – Neutron-induced cross sections of short-lived nuclei via the surrogate reaction method – Proc. à paraître (EPJ Web of Conferences)

**S.J. Rose** et al. – Minimization of actinide waste by multi-recycling of thoriated fuels in the EPR reactor – Proc. à paraître (EPJ Web of Conferences)

## Théorie et phénoménologie

Achievements and New Directions in Subatomic Physics: Workshop in Honour of Tony Thomas' 60<sup>th</sup> Birthday, Adelaide, Australia, 15 - 19 February 2010

**P. Guichon** et al. – Nucleon form factors with  $NF=2$  twisted mass fermions – AIP Conf. Proc. 1261 (2010) 141-146

The XLV<sup>th</sup> Rencontres de Moriond ElectroWeak Interactions and Unified Theories 2010, La Thuile, Italy, 6 - 13 March 2010

**S. Kraml** – Yukawa-unified SUSY and 7 TeV LHC – Proc. of the XLV<sup>th</sup> Rencontres de Moriond. 2010 Electroweak Interactions and unified Theories, La thuile, Aosta Valley, Italy, March 6 - 13 2010 - E. Augé et al. (ed.) - The GIOI publishers (2010) p. 113

The XLV<sup>th</sup> Rencontres de Moriond QCD and High Energy Interactions 2010, La Thuile, Italy, 13 - 20 March 2010

**J. Debove** – Threshold and transverse-momentum resummations for gaugino-pair hadroproduction – Proc. à paraître XVIII International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Firenze, Italy, 19 - 23 April 2010

**M. Klasen** – Determining SUSY particle mixing with polarized hadron beams – PoS (DIS2010) 233

**M. Klasen** – NLO QCD analysis of single-diffractive dijet production at the Tevatron – PoS (DIS2010) 073

**K. Kovarik** – PDFs for nuclear targets – PoS (DIS2010) 044

Light Cone 2010 Relativistic Hadronic and Particle Physics (LC2010), Valencia, Spain, 14 - 18 June 2010

**J. Carbonell** et al. – Solution of the Bethe-Salpeter equation in Minkovski space for a two fermion system – Proc. of Science POS(LC2010)014

**B. Desplanques** et al. – PS-meson form factors in relativistic quantum mechanics and constraints from covariant space-time translations – Proc. of Science POS(LC2010) 016

XXVIII International Symposium on Lattice Field Theory (Lattice 2010), Villasimius, Sardinia, Italy, 14 - 19 June 2010

**M. Papinutto** et al. ETM Collaboration – From strange to charmed baryons using Nf=2 twisted mass QCD – PoS (Lattice 2010) 120

**V. Drach** et al. – Low lying baryon spectrum with Nf=2+1+1 dynamical twisted quarks – PoS (Lattice 2010) 101

**P. Dimopoulos** et al. ETM Collaboration – mixing beyond the SM from Nf=2 tmQCD – PoS (Lattice 2010) 302

R. Baron et al. – Light hadrons from Nf=2+1+1 dynamical twisted mass fermions – PoS (Lattice 2010) 123

15<sup>th</sup> International QCD Conference, Montpellier, France, 28 June - 3 July 2010

**M. Klasen** – Factorization breaking in single-diffractive dijet production at the Tevatron – Nuclear Physics B – Proc. Suppl. 207-208 (2010) 25-28

**J. Carbonell** et al. – From strange to charmed baryons using two-flavour QCD – Nuclear Physics B – Proc. Suppl. 207-208 (2010) 367-370

35<sup>th</sup> International Conference on High Energy Physics (ICHEP), Paris, France, 22 - 28 July 2010

**R. Bonciani** et al. – Two-loop corrections to top-antitop production at hadron colliders – PoS (ICHEP2010) 098

Three Days of Quarkonium Production in pp and pA Collisions (QUARKONIUM 2010), Palaiseau, France, 29 - 31 July 2010

**L. Schienbein** – Nuclear PDFs – Nuclear Physics B – Proc. Suppl. 214 (2011) 73-79

**T. Stavreva** – Heavy quark & direct photon production and heavy quark parton densities – Nuclear Physics B – Proc. Suppl. 214 (2011) 114-117

3<sup>rd</sup> International Workshop on Prospect for Charged Higgs Discovery at Colliders (cH+-arged 2010), Uppsala, Sweden, 27 - 30 September 2010

**T. Plehn** et al. – Charged Higgs production with a top in MC@NLO – Proc. à paraître (PoS)

21<sup>st</sup> European Conference on Few-Body Problems in Physics (EFB21), Salamanca, Spain, 29 August - 3 September 2010

**C. Semay** et al. – The quantum N-body problem and the auxiliary field method – Few-Body Syst. 50 (2011) 211-213

3<sup>rd</sup> International Workshop on Nucleon Structure at Large Bjorken x, Newport News, Virginia, USA, 13 - 18 October 2010

**K. Kovarik** et al. – Nuclear corrections in DIS and their compatibility with global NPFD analyses – AIP Conf. Proc. 1369 (2011) 80-87

Workshop The Many Faces of QCD, Gent, Belgium, 2 - 5 November 2010

**O. Pène** et al. – Vacuum expectation value of A<sup>2</sup> from LQCD – PoS (FacesQCD) 010

The XLVI<sup>th</sup> Rencontres de Moriond ElectroWeak Interactions and Unified Theories 2011, La Thuile, Italy, 13 - 20 March 2011

**A. Wingerter** – A Fourth Chiral Generation and SUSY Breaking – Proc. à paraître

**S. Fichet** – Susy flavor problem in 5D GUTS – Proc. à paraître

XIX International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2011), Newport News, VA, USA, April 11 - 15 2011

**K. Kovarik, T. Stavreva** – Probing gluon nuclear PDF with direct photon production in association with a heavy quark – Proc. à paraître (AIP)

29<sup>th</sup> International Symposium on Lattice Field Theory (Lattice 2011), Squaw Valley, California, USA, 10 - 16 July 2011

**B. Blossier et al.** – RI-MOM scheme renormalization constants ( $N_f=4$ ) and the running coupling constant ( $N_f=2+1+1$ ) using twisted-Wilson quarks – Proc. à paraître (Proceedings of Science)

**N. Carrasco et al.** – mixing in the Standard Model from  $N_f = 2+1+1$  twisted mass lattice QCD – Proc. à paraître (Proceedings of Science)

**B. Blossier et al.** – Renormalisation constants of quark bilinears in lattice QCD with four dynamical Wilson quarks

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 July 2011

**R. Bonciani** – Two-loop mixed QCD-EW virtual corrections to the drell-Yan production of Z and W bosons – Proc. à paraître (Proceedings of Science)

**R. Bonciani** – Top-quark production at hadron colliders – Proc. à paraître (Proceedings of Science)

**T. Stavreva et al.** – Probing nuclear parton densities and parton energy loss processes through photon + heavy-quark jet production in p-A and A-A collisions – Proc. à paraître (Proceedings of Science)

**A. Wingerter et al.** – A scan for models of neutrino mixing from non-Abelian discrete symmetries – Proc. à paraître (Proceedings of Science)

**K. Kovarik et al.** – Compatibility of global NPDF analyses of neutrino DIS and charged-lepton DIS data – Proc. à paraître (Proceedings of Science)

**C. Alexandrou et al.** – Moments of parton distributions in twisted mass lattice – Proc. à paraître (Proceedings of Science)

Workshop “Implications of LHC results for TeV-scale Physics”, CERN, Geneva, Switzerland, 29 August- 2 September 2011

**S. Kraml** – Introduction and goals of working groupe 2

## Pôle accélérateurs et sources d'ions

8<sup>th</sup> International Conference on Open Magnetic Systems for Plasma Confinement (OS2010), Novosibirsk, Russia, 5 - 9 July 2010

**V.G. Zorin et al.** – ECR breakdown of heavy gases in open mirror trap – Fusion Science and Technology 59/1T (2011) 140-143

XIX<sup>th</sup> International Workshop on ECR Ion Sources (ECRIS 2010), LPSC, Grenoble, France, 23 - 26 August 2010

**M. Marie-Jeanne et al.** – Measurement of the sixty GHz ECR Ion Source using megawatt magnets – SEISM magnetic field map – Proc. On line (JACoW) MOCO04

**C. Peaucelle et al.** – First  $A/Q=3$  beams of Phoenix V2 on the heavy ions low energy beam transport line of SPIRAL2 – Proc. On line (JACoW) TUCOAK01

**V.G. Zorin et al.** – “Preglow” investigation in ECR discharge @ 37 GHz, 100 kW – Proc. On line (JACoW) TUCOBK02

**P. Sortais et al.** – Beam, multi-beam and broad beam production with COMIC devices – Proc. On line (JACoW) TUCOCK01

**F. Ames et al.** – Commissioning of the ECRIS charge state breeder at Triumf – Proc. On line (JACoW) WECOBK01

**T. Lamy et al.** – Fine frequency tuning of the Phoenix charge breeder used as a probe for ECRIS plasmas – Proc. On line (JACoW) WECOBK03

12<sup>th</sup> International Conference on Plasma Surface Engineering (PSE2010), Garmisch-Partenkirchen, Germany, 13 - 17 September 2010



- P. Sortais** et al. – Distributed mini ECR discharges for large plasma or beam generation – Proc. à paraître  
2011 Particle Accelerator Conference (PACEleven), New York, USA, 28 March- 1 April 2011
- A. Novokhatski** et al. – SuperB: next-generation  $e^+e^-$  B-factory collider – Proc on line Jacow PAC'11 690-692  
10<sup>th</sup> International Topical Meeting on Nuclear Applications of Accelerators (AccApp'11), Knoxville, TN, USA, 3 - 7 April 2011
- M. Baylac** et al. – A versatile neutron source for the low ADS GUINEVERE – Proc. on CD-Rom 8p.  
Advances in Radioactive Isotope Science (ARIS 2011), Leuven, Belgium, 29 May- 3 June 2011
- P. Suominen** et al. – Plasma ion source development for 1+ molecular radioactive ion beams  
8<sup>th</sup> International Workshop “Strong Microwaves and Terahertz Waves: Sources and Applications”, Nizhny Novgorod, Russia, 9 - 16 July 2011
- O. Tarvainen** et al. – Pulsed Operation of ECR Ion Sources – Plasma Physics and Diagnostics – Proc. of the 8<sup>th</sup> International Workshop “Strong Microwaves and Terahertz Waves: Sources and Applications” Russian Academy of Sciences Institut of Applied Physics p. 43  
15<sup>th</sup> International Conference on RF Superconductivity (SFR 2011), Chicago, USA, 25 - 29 July 2011
- Y. Gomez Martinez** et al. – Power Coupler for SPIRAL2 – Proc. à paraître ( JACoW, PRST-AB)  
Meeting of the Division of Particles and Fields of the American Physical Society (DPF-2011), Providence, Rhode Island, USA, 9 - 13 August 2011
- W. Wittmer** et al. – Status of the Super-B factory Design – Proc. à paraître ( SLAC, econf)  
13<sup>th</sup> International Workshop on Neutrino Factories, Super Beams and Beta Beams (NUFACT 11), Geneva, Switzerland, 1 - 6 August 2011
- T. Lamy** et al. – 60 GHz ECR source status

## Interdisciplinaire

### Imagerie médicale – Services Techniques – Développements technologiques

- International Linear Collider Workshop 2010 (LCWS10 & ILC10), Beijing, China, 26 - 30 March 2010
- D. Grondin, D. Jeans** on behalf of the CALICE Si-W ECAL group– Next generation CALICE electromagnetic calorimeter – Proc. à paraître econf  
IEEE International Conference on Integrated Circuit Design and Technology (ICICDT), Grenoble, France, 2 - 4 June 2010
- L. Gallin-Martel** et al. – A low power 5MS/s 14 bit switched capacitors digital to analog converter – CD Rom ISBN 9781424457748 IEEE (2010) 240-243  
Topical Workshop on Electronics for Particle Physics (TWEPP-10), Aachen, Germany, 20 - 24 September 2010
- O. Bourrion** et al. – Level-1 jet trigger hardware for the ALICE electromagnetic calorimeter at LHC – JINST 5 (2010) C12048  
17<sup>th</sup> IEEE International Conference on Electronics, Circuits, and Systems (ICECS 2010), Athens, Greece, 12 - 15 December 2010
- A.F. Bautista** et al. – A 0.5 V 94 dB SNR CT-Sigma-Delta modulator for implantable and portable biomedical devices – Proc. à paraître (IEEE)  
2011 IEEE Nuclear Science Symposium and Medical Imaging Conference, Valencia, Spain, 23 - 29 October 2011
- E. Delagnes** et al. – NECTAr0, a new high speed digitizer ASIC for the Cherenkov telescope array – Proc. à paraître (IEEE)  
2011 IEEE Electronics, Robotics and Automotive Mechanics Conference (CERMA), Cuernavaca, Mexico, 15 - 18 November 2011
- J. Gomez-Quinones** et al. – A multi-channel sinusoidal generator for electrokinetic stimulation of microfluidic platforms – Proc. à paraître (IEEE)



## Communication avec actes dans un congrès national

### Quarks, leptons et symétries fondamentales

#### ATLAS-ILC

Congrès Général de la SFP, Bordeaux, France, 4 - 8 juillet 2011

**J. Stark** – Vers un modèle de l'origine de la masse : la chasse au boson de Higgs auprès du Tevatron (Fermilab USA) et du LHC (CERN Genève) – Proc. à paraître (online)

### Astroparticules et Cosmologie

#### AMS-CREAM-LSST

Journées Jeunes Chercheurs 2010, Angers, France, 21 - 27 novembre 2010

**J.-S. Ricol** – Un peu de poésie dans un monde d'énergie transverse manquante – Journées Jeunes Chercheurs 2010 SFP-BPS (2011) 203-205

#### AUGER-CODALEMA

Journées de Rencontre des Jeunes Chercheurs 2011 (JRJC 2011), Annecy, France, 4 - 10 décembre 2011

**M. Tartare** – Neutrinos d'ultra haute énergie à l'observatoire Pierre Auger – Proc. à paraître

#### PLANCK-MIMAC

Journées Jeunes Chercheurs 2010, Angers, France, 21 - 27 novembre 2010

**G. Hurier** – Séparation de composantes, application à l'effet Sunyaev-Zel'dovich dans le cadre de la mission Planck – Journées Jeunes Chercheurs 2010 SFP-BPS (2011) 121-126

Journées de Rencontre des Jeunes Chercheurs 2011 (JRJC 2011), Annecy, France, 4 - 10 décembre 2011

**G. Hurier** – Séparation de composantes, application à l'effet tSZ dans l'expérience PLANCK – Proc. à paraître

**L. Sanselme** – Cosmologie observationnelle avec le satellite Planck : étude des systématiques dans les données en temps – Proc. à paraître

### Physique des réacteurs

Rencontres Jeunes Chercheurs 2010, Annecy, France, 12 - 18 décembre 2010

**H.-E. Thyebault** – L'expérience GUINEVERE : étude d'un réacteur sous-critique piloté par accélérateur – Rencontres Jeunes Chercheurs 2010, Annecy, 12 - 18 décembre 2010 (2011) 35-38

Congrès Général de la SFP, Bordeaux, France, 4 - 8 juillet 2011

**C. Sage** et al. –  $^{233}\text{U}$  fission yields measurements in the heavy mass region – Proc. à paraître (online)

Journées de Rencontre des Jeunes Chercheurs 2011 (JRJC 2011), Annecy, France, 4 - 10 décembre 2011

**S. Chabod** – Introduction physique nucléaire et applications – Proc. à paraître

### Interdisciplinaire

Rencontres Jeunes Chercheurs 2010, Annecy, France, 12 - 18 décembre 2010

**I. Fonteille** – TraDeRa : développement d'un détecteur pour le contrôle en ligne et en temps réel des traitements de radiothérapie – Rencontres Jeunes Chercheurs 2010, Annecy, 12 - 18 décembre 2010 (2011) 107-110

### Services Techniques – développements technologiques

Journées Réseaux 2011 (JRES 2011), Toulouse, France, 22 - 25 novembre 2011

F. Berthoud et al. – Des hommes, des serveurs, une planète : vers une infrastructure mutualisée éco-responsable – Proc. on line 8p.

**I. Zakari Toure** et al. – ZneTS v1.2 "The NEtwork Trafic Supervisor" – Proc. on line 9p.

## Communications orales sans actes dans un congrès international ou national

### Quarks, leptons et symétries fondamentales

#### ATLAS-ILC

Workshop GRANIT 2010, École de Physique des Houches, Les Houches, France, 14 - 19 février 2010

K. Protasov – Transitions between quantum states caused by vibration noise

G. Pignol – Analysis of storage times of UCN in gravitational quantum states

19<sup>th</sup> International Conference on General Relativity and Gravitation (GR19), Mexico City, Mexique, 5 - 9 July 2010

K. Protasov – Constraints for short-range forces from neutron experiments

### Astroparticules et Cosmologie

#### AMS-CREAM-LSST

AMS: Issues and prospects, LAPP, Annecy-le-Vieux, France, 9 - 10 March 2010

L. Derome – Le rayonnement cosmique dans l'environnement terrestre

A. Barrau – Autres contribution matière noire

Recent Developments in Gravity (NEB14), Ioannina, Greece, 8 - 11 June 2010

T. Cailleteau – Observational consequences of loop quantum cosmology

11<sup>th</sup> International Symposium Frontiers of Fundamental Physics (FFP11), Paris, France, 6 - 9 July 2010

A. Barrau – Loop quantum gravity and the early universe

Mathematical, Physical and Conceptual Aspects of Quantum Gravity Workshop, APC, Paris, France, 23 - 25 March 2011

A. Barrau – Some phenomenological aspects of loop quantum cosmology

Workshop on Indirect Dark Matter Searches (IDMS 2011), Hamburg, Germany, 14 - 17 June 2011

D. Maurin – Cosmic ray propagation with USINE

#### PLANCK-MIMAC

38<sup>th</sup> COSPAR Scientific Assembly (Cospar10), Bremen, Germany, 18 - 25 July 2010

C. Renault – The Planck High Frequency Instrument

### Physique hadronique et Matière nucléaire

#### ALICE-JLAB

3<sup>rd</sup> France China particle Physics Laboratory Workshop, IPNL, Lyon, France, 7 - 10 April 2010

Y. Mao – Photons-hadrons correlation measurements in ALICE/LHC

Rencontres QGP-France 2010, Étretat, France, 20 - 23 septembre 2010

G. Conesa-Balbastre for the ALICE collaboration – First physics from the ALICE electromagnetic calorimeters

Y. Mao – Quark matter tomography: an ALICE measurement at LHC

Winter Workshop on Recent QCD Advances at the LHC, École de Physique des Houches, Les Houches, France, 13 - 18 February 2011

C. Silvestre – Quarkonia and Z boson production in Pb-Pb collisions (CMS Collab)

### Structure nucléaire

DESIR Workshop 2010, Leuven, Belgium, 26 - 28 May 2010

G. Simpson – A Fast-Timing Setup for nuclear structure studies at DESIR

### Physique des réacteurs

Réunion SGF: « Uranium: géologie, géophysique, chimie », Orsay, France, 29 - 30 November 2010

A.A. Zakari et al. – Étude prospective de la transition technologique électronucléaire

Colloque National Énergie 2011, Montpellier, France, 28 - 30 mars 2011

**J.-M. Loiseaux** – Stockage chaleur d'été « stockage saisonnier de chaleur à grande échelle. Étude thermo hydraulique par simulation numérique de diverses configurations au cours des phases de chargement et déchargement »

**A. Bidaud** – PEPITTE « Projet d'Étude Physico Économique de la Transition Technologique de l'Électro-Nucléaire »

Institute for Safety and Reliability “Energy Economics and Policy” Course, Munich, Germany, 4 - 8 April 2011

**M. Brovchenko** – The state of the art of nuclear energy production in Ukraine

**I. Zakari** – Nuclear incidents in France

Advances in Radioactive Isotope Science (ARIS 2011), Leuven, Belgium, 29 May- 3 June 2011

**E. Martin** – Measurements of the mass and isotopic yields of the  $^{233}\text{U}(n,f)$  and  $^{241}\text{Pu}(n,f)$  reactions at the Lohengrin spectrometer

JEFF- GEDEPEON Workshop on Nuclear Data Measurements, Issy-les-Moulineaux, France, 28 - 29 November 2011

G. Kessedjian – Fission yield measurements at ILL/Lohengrin

## **Théorie et phénoménologie**

Rencontre de Physique des Particules 2010, IPN, Lyon, France, 25 - 27 janvier 2010

**T. Stavreva** – Direct photon production in association with a heavy quark jet at hadron and ion colliders

Les Rencontres de Physique de la Vallée d'Aoste, Results and Perspectives in Particle Physics, (La Thuile 2010), La Thuile, Italy, 28 February - 6 March 2010

**S. Kraml** – Status and prospects of SUSY for the first year of LHC

Theorie LHC France / FCPPL Hadron Satellite, Lyon, France, 6 April 2010

**B. Desplanques** – Pseudoscalar meson form factors in relativistic QM

**I. Schienbein** – Parton distribution functions for the LHC

**R. Bonciani** – Top-antitop production at the LHC

**C. Weydert** – Charged Higgs-boson production with a top quark in MC@NLO and POWHEG

**S. Fichet** – Discriminating SUSY models at the LHC: a case study

MC4BSM, Copenhagen, Denmark, April 14 - 16 2010

**C. Weydert** – Associated production of top quarks and charged Higgs bosons @LHC @NLO

Galileo Galilei institute Conference The Dark Matter Connection: Theory & Experiment, Florence, Italy, 17 - 21 May 2010

**S. Kraml** – Yukawa unified SUSY, dark matter and the LHC

From the Planck Scale to the ElectroWeak Scale (Planck 2010), Geneva, Switzerland, 31 May- 4 June 2010

**S. Kraml** – LHC signatures of Yukawa-unified SUSY

18<sup>th</sup> International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY10), Bonn, Germany, 23 - 28 August 2010

**S. Fichet** et al. – The MSSM with a degenerate Higgs mass matrix

3<sup>rd</sup> International Workshop on High Precision for Hard Processes at the LHC (HP2.3rd), Florence, Italy, 14 - 17 September 2010

**R. Bonciani** – Top-antitop production at hadron colliders

Rencontres de Physique des Particules 2011, Clermont-Ferrand, France, USA, 13 - 14 January 2011

**R. Bonciani** – Two-Loop corrections to top-antitop production at hadron colliders

**A. Wingerter** – Tribimaximal mixing from small groups

Winter Workshop on Recent QCD Advances at the LHC, École de Physique des Houches, Les Houches, France, 13 - 18 February 2011

**I. Schienbein** – Heavy-quark production in p-p at the LHC

## Pôle accélérateurs et sources d'ions

SuperB XII General Meeting, LAPP, Annecy-Le-Vieux, France, 15 - 20 March 2010

**N. Monseu** – Spin tracking

**M. Baylac** – Low energy polarimetry

XIII SuperB General Meeting, Isola D'Elba, Italy, 30 May- 5 June 2010

**N. Monseu, F. Méot** – Dynamics studies regarding super B lattice status report LPSC 06 2010

XIX<sup>th</sup> International Workshop on ECR Ion Sources (ECRIS 2010), LPSC, Grenoble, France, 23 - 26 August 2010

**A. Villari et al.** – PK-ISIS: a new superconducting ECR ion source at Pantechnik

Workshop on Spin Simulation Tools, DESY, Hamburg, Germany, 9 - 11 November 2010

**N. Monseu** – Introduction to Zgoubi

XV SuperB General Meeting, Caltech, Pasadena, California, USA, 14 - 17 December 2010

**N. Monseu** – Polarization results from Zgoubi

SPIRAL2 Week 2011, Caen, France, 24 - 27 January 2011

**T. Lamy** – Charge breeder & n+ vertical beam-line

Journées Accélérateurs de la SFP, Roscoff, France, 2 - 5 octobre 2011

**J.-M. de Conto** – L'accélérateur pour le programme ADS à puissance nulle GUINEVERE

2<sup>nd</sup> SuperB Collaboration Meeting 2011, Rome, Italy, 13 - 16 December 2011

**N. Monseu** – Spin tracking at SuperB

## Interdisciplinaire

### Plasmas-Matériaux-Nanostructures

Journées du Réseau des Plasmas Froids, Toulouse, France, 24 - 27 mai 2011

**A. Bès et al.** – Dispositif de mesure des paramètres plasma par sonde de Langmuir: QUÈ DO

### Services Techniques – développements technologiques

CALICE Workshop, Arlington, Texas, USA, 10 - 12 March 2010

**J. Giraud** – Mechanics for ECAL W/Si LPSC/LLR

7<sup>e</sup> Journées Informatique IN2p3-IRFU, Aussois, France, 17 - 21 mai 2010

**G. Dargaud** – L'informatique au froid

ATLAS Meta-Data Handling and AMI Workshop, Grenoble, France, 30 - 31 août 2010

**S. Albrand** – AMI and its place in the ATLAS metadata infrastructure

Meeting on Cryoelectronic Devices (KRYO 2011), Autrans, France, 2 - 4 octobre 2011

**O. Bourrion et al.** – Readout electronics for NIKA – Annotated Slides published on line ESNF (European Superconductivity News Forum) 18 October 2011 STP282

Entretiens Jacques Cartier “Colloquium: Information and Communications Technologies: Are they Green?” (EJC – ICT 2011), Montréal, Canada, 3 - 4 October 2011

**B. Bouterin** – Should we choose the “free cooling”? What are the risks if we consume less?

École IN2P3 Informatique « Bonnes pratiques de gestion des infrastructures informatiques d'un laboratoire » 2011, Fréjus, France, 10 - 14 octobre 2011

**J.-L. Archimbaud** – La qualité dans la gestion des infrastructures d'un laboratoire. ça veut dire quoi en pratique ?

DatacenterDynamics, Lyon, France, 15 novembre 2011

**B. Bouterin** – Étude de cas dans un Tier-2 intégré au « Large Hadron Collider Computing Grid »: conception et déploiement d'un nouveau système de « free cooling » bimodal: évaluation de bénéfices énergétiques et en fiabilité

## Communications par affiche dans un congrès international ou national

### Quarks, leptons et symétries fondamentales

#### ATLAS-ILC

Hadron Collider Physics Symposium 2011 (HCP 2011), Paris, France, 14 - 18 November 2011

**Q. Buat** – Search for extra dimension in the diphoton final state with ATLAS – Proc. à paraître

### Astroparticules et Cosmologie

#### AMS-CREAM-LSST

38<sup>th</sup> COSPAR Scientific Assembly (Cospar10), Bremen, Germany, 18 - 25 July 2010

**A. Putze et al.** – A Markov chain Monte Carlo technique for galactic cosmic-ray physics

217<sup>th</sup> American Astronomical Meeting, Seattle, Washington, USA, 9 - 13 January 2011

**A. Abate et al.** – Baryon Acoustic Oscillations in the LSST Photometric Survey Survey – Bulletin of the American Astronomical Society 43 (2011) 252.19

#### AUGER-CODALEMA

XXIV International Conference on Neutrino Physics and Astrophysics (Neutrino 2010), Athens, Greece, 14 - 19 June 2010

**D. Lebrun et al.** – A small air shower particle detector array dedicated to UHE neutrinos – Proc. à paraître

22<sup>nd</sup> European Cosmic Ray Symposium (ecrs2010), Turku, Finland, 3 - 6 August 2010

**F. Montanet** – NOY: a neutrino observatory network project based on stand alone air shower detector arrays

#### PLANCK-MIMAC

International School on Astro-Particle Physics (ISAPP 2011), Heidelberg, Germany, 8 - 15 July 2011

**J. Billard et al.** – Directional detection of Dark Matter with MIMAC

Topical Workshop on Electronics for Particle physics (TWEPP-11), Vienna, Austria, 26 - 30 September 2011

**J.-P. Richer, et al.** – Development and validation of a 64 channel front end ASIC for 3D directional detection with MIMAC – JINST 6 (2011) C11016

### Physique hadronique et Matière nucléaire

#### ALICE-JLAB

Quark Matter 2011 (QM2011), Anecy, France, 22 - 28 mai 2011

**N. Arbor** – Azimuthal correlation between photon/ $\pi^0$  and charged hadrons with the ALICE experiment

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 juillet 2011

**J. Dumas** – An overview of the Polarized Electrons for Polarized Positrons (PEPPo) experiment – Proc. à paraître (Proceedings of Science)

École Joliot-Curie (30 years) “Physics at the femtometer scale” (EJC 2011), La Colle sur Loup, France, 12 - 17 September 2011

**N. Arbor** – Gamma-hadron correlations with the ALICE experiment

### Structure Nucléaire

Zakopane Conference on Nuclear Physics. Extremes of the Nuclear Landscape, Zakopane, Poland, 30 August - 5 September 2010

**T. Malkiewicz** – Recent results of prompt and delayed gamma-ray and conversion-electrons spectroscopy of neutron-rich lanthanide nuclei

Advances in Radioactive Isotope Science (ARIS 2011), Leuven, Belgium, 29 May - 3 June 2011

**C. Bingham et al.** – Magnetic dipole moment and decay studies of the  $K = 37/2$ - isomeric state in  $^{177}\text{Hf}$  via on-line nuclear orientation

**C. Gaulard et al.** – POLAREX: Study of frozen polarized nuclei

**D. Kowalska** et al. – First online results from the ISOLTRAP decay-spectroscopy setup: excitation energy and state assignment of the  $^{194}\text{Tl}$  isomer

**M. Rudigier** et al. – Microsecond isomers in neutron-rich  $79 \leq A \leq 100$  nuclei

Nordic Conference on Nuclear Physics 2011 (NCNP 2011), Stockholm, Sweden, June 13 - 17 2011

**G. Thiamova** – The IBM description of triaxial nuclei

## Physique des réacteurs

Colloque National Énergie 2011, Montpellier, France, 28 - 30 mars 2011

**J.-M. Loiseaux** – Stockage chaleur d'été « Stockage saisonnier de chaleur à grande échelle. Étude thermo hydraulique par simulation numérique de diverses configurations au cours des phases de chargement et déchargement »

**A. Bidaud** – PEPITTE « Projet d'Étude Physico Économique de la Transition Technologique de l'Électro-Nucléaire »

Advances in Radioactive Isotope Science (ARIS 2011), Leuven, Belgium, 29 May - 3 June 2011

**T. Materna** et al. – Indirect identification of nanosecond isomeric states in neutron-rich nuclei with mass in  $A=138-145$  range using the fission fragment separator Lohengrin

École Joliot-Curie (30 years) “Physics at the femtometer scale” (EJC 2011), La Colle sur Loup, France, 12 - 17 September 2011

**F. Martin** – Measurements of the mass and isotopic yields of the  $^{233}\text{U}(\text{nth},\text{f})$  reactions at the Lohengrin spectrometer

3<sup>rd</sup> International Workshop on Compound Nuclear Reactions and Related Topics (CNR 11), Prague, Czech Republic, 19 - 23 September 2011

**I. Companis** et al. – Measurement of neutron capture and fission cross sections of  $^{233}\text{U}$  in the resonance region – Proc. à paraître (EPJ Web of Conferences)

## Interface Physique-Biologie – Tomographie

9<sup>e</sup> Journées Scientifiques de la Société Française de Physique Médicale, Bordeaux, France, 19 - 21 mai 2010

**I. Fonteille** – TraDeRa: développement d'un détecteur pour le contrôle qualité IMRT en ligne et en temps réel

## Théorie et phénoménologie

3<sup>rd</sup> International Workshop on Top Quark Physics (TOP 2010), Bruges, Belgium, 31 May- 4 June 2010

**C. Weydert** – Associated production of top quarks and charged Higgs bosons at next-to-leading order – Il Nuovo Cimento C 33/4 (2010) 343-345

35<sup>th</sup> International Conference on High Energy Physics (ICHEP), Paris, France, 22 - 28 juillet 2010

**T. Stavreva** – Direct photon and heavy quark jet production at the LHC – PoS (ICHEP2010) 360

Quark Matter 2011 (QM2011), Annecy, France, 22 - 28 mai 2011

**T. Stavreva** et al. – Probing nuclear parton densities and parton energy loss processes through photon + heavy-quark jet production in p-A and A-A collisions – J. Phys. G: Nucl. Part. Phys. 38 (2011) 124187

International Europhysics Conference on High Energy Physics (HEP 2011), Grenoble, France, 21 - 27 juillet 2011

**I. Schienbein** – D and B meson production at the LHC in the GM-VFN scheme at NLO – Proc. à paraître (Proceedings of Science)

**T. Jezo** – Phenomenology of G(221) models at the LHC – Proc. à paraître (Proceedings of Science)

**Z. Pan** – NNLO QCD corrections to – Proc. à paraître (Proceedings of Science)

École Joliot-Curie (30 years) “Physics at the femtometer scale” (EJC 2011), La Colle sur Loup, France, 12 - 17 September 2011

**P. Zhaoting** – NNLO QCD corrections to  $b \rightarrow u W^*$

## Pôle accélérateurs et sources d'ions

1<sup>st</sup> International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, 23 - 28 May 2010

B. Cros et al. – Highlights of accelerator activities in France on behalf of the accelerator division of the French physics society – Proc. on line JACOW IPAC'10 MOPEA048 181-183



C. Prinano et al. – Magnetic modelling, measurements and sorting of the CNAO synchrotron dipoles and quadrupoles – Proc. on line JACOW IPAC'10 MOPEB004 280-282

**F. Méot, N. Monseu** – Lattice design and study regarding the Super-B project – Proc. on line JACOW IPAC'10 TUPEB001 1512-151

P.-E. Bernaudin et al. – Status of the SPIRAL2 superconducting LINAC – Proc. on line JACOW IPAC'10 MOPD025 732-734

H. Huang et al. – Spin dynamics simulations at AGS – Proc. on line JACOW IPAC'10 MOPD001 666-668

Y. Giboudot et al. – Beam dynamics simulations regarding the experimental FFAG EMMA, using the on-line code – Proc. on line JACOW IPAC'10 THPD023 4322-4324

J.S. Berg et al. – Recent developments on the EMMA on-line commissioning software – Proc. on line JACOW IPAC'10 THPD024 4325-4327

R. Edgecock et al. – The EMMA non-scaling FFAG – Proc. on line JACOW IPAC'10 THPEC090 4266-4268

XIX<sup>th</sup> International Workshop on ECR Ion Sources (ECRIS 2010), LPSC, Grenoble, France, 23 - 26 août 2010

**A. Coly** et al. – High current production with 2.45 GHz ECR ion source

P. Suominen et al. – Ionization efficiency of a COMIC ion source equipped with a quartz plasma chamber – Proc. On line (JACoW) MOPOT006

CERN Accelerator School “Introduction to Accelerator Physics”, Varna, Bulgaria, 19 September - 1 October 2010

**N. Monseu, F. Méot** – Lattice design tool developments regarding the super-B project

2<sup>nd</sup> International Particle Accelerator Conference (IPAC2011), San Sebastian, Spain, 4 - 9 September 2011

**N. Monseu** et al. – Spin dynamic tool developments and study regarding the Super-B project – Proc on line Jacow IPAC11 3681-3683

**P. Bosland** et al. – Status of the low beta 0.07 cryomodules for SPIRAL2 – Proc on line Jacow IPAC11 256-258

**E.H.M. Wildner** et al – Beta beams: an accelerator-based facility to explore neutrino oscillation physics – Proc on line Jacow IPAC11 2535-2537

**J. Broere** et al. – Medium power 352 MHz solid state pulsed RF amplifiers for the CERN linac4 project – Proc on line Jacow IPAC11 400-402

14<sup>th</sup> International Conference on Ion Sources (ICIS 2011), Giardini Naxos, Italy, 12 - 16 September 2011

**P. Delahaye** et al. – Prospects for advanced ECR and EBIS charge breeding methods at GANIL – Proc. à paraître (RSI)

**P. Sortais** et al. – Technical use of COMIC devices – Proc. à paraître (RSI)

**T. Thuillier** et al. – Preliminary design of a new superconducting ECR Ion source for SPIRAL2 – Proc. à paraître (RSI)

**G. Gaubert** et al. – Pantchnik new superconducting ion source: PKISIS – Proc. à paraître (RSI)

**T. Lamy** et al. – Beam injection improvement for ECR charge breeders – Proc. à paraître (RSI)

22<sup>th</sup> International Conference on Magnet Technology (MT-22 2011), Marseille, France, 12 - 16 September 2011

**T. Lamy** et al. – Split magnet for efficient electron cyclotron resonance ion sources developments – Proc. à paraître (IEEE Transactions on Applied Superconductivity)

## Interdisciplinaire

### Plasmas – Matériaux - Nanostructures

8<sup>th</sup> European Conference on Thermoelectrics (ECT 2010), Como, Italy, 22 - 24 September 2010

**H. Le-Quoc** et al. – Deposition of Thin Films of  $Mg_2Si_{1-x}Sn_x$  Solid Solution by Plasma Assisted Co-sputtering – Proc. à paraître

Journées du Réseau des Plasmas Froids, Toulouse, France, 24 - 27 mai 2011

**H. Le-Quoc** et al. – Thin films of thermoelectric compound  $Mg_2Sn$  deposited by co-sputtering using ECR microwave multi-dipolar plasma

18<sup>th</sup> International Colloquium on Plasma Processes (CIP 2011), Nantes, France, 4 - 8 juillet 2011

**H. Le-Quoc** et al. –  $Mg_2Si_{1-x}Sn_x$  thin film deposition by plasma assisted co-sputtering for thermoelectric applications – Proc. à paraître (EPJA)

## Services Techniques – développements technologiques

9<sup>th</sup> IEEE International NEWCAS Conference (NEWCAS 2011), Bordeaux, France, 26 - 29 juin 2011

**J. Gomez-Quinones** et al. – An application specific multi-channel stimulator for electrokinetically-driven microfluidic device – Proc. à paraître (IEEE)

Rencontres Scientifiques France Grilles 2011, Lyon, France, 19 septembre 2011

**C. Biscarat**, B. Bzeznik – Collaboration des grilles de production grenobloises CIMENT et LPSC - Développement, ouverture à de nouvelles communautés d'utilisateurs et impacts scientifiques

Topical Workshop on Electronics for Particle physics (TWEPP-11), Vienna, Austria, 26 - 30 September 2011

E. Delagnes et al. – The Nectar GHz digitizer ASIC for the Cherenkov telescope array – Proc. à paraître (JINST)

18<sup>th</sup> International Workshop on Room-Temperature Semiconductor Detectors (RTSD 2011), Valencia, Spain, 23 - 29 October 2011

S. Lux et al. – Study of the physical factors influencing the spatial resolution of CZT detectors

## Rapports

### Quarks, leptons et symétries fondamentales

C. Adloff et al. (**D. Dzahini, L. Gallin-Martel, J. Giraud, D. Grondin, J.-Y. Hostachy, K. Krastev, L. Morin, F.-E. Rarbi**) CALICE Collaboration – CALICE Report to the DESY Physics Research Committee - Report to the Calorimeter R&D Review Panel

C. Adloff et al. (**J.-Y. Hostachy, L. Morin**) CALICE Collaboration – Construction and commissioning of the CALICE analog hadron calorimeter prototype – DESY 10-032 – 36p.

**F. Malek**, F. Hernandez, F. Chollet-Leflour – A worldwide grid infrastructure for the four LHC experiments

U. Abeyssekara et al. (**C. Bernard, O. Bourrion, B. Boyer, Y. Carcagno, J. Faivre, B. Foglio, C. Furget, S. Gadrat, R. Guernane, S. Kox, Y. Mao, J.-F. Muraz, J.-S. Réal**) – ALICE EMCal physics performance report – Submitted to the U.S. Department of Energy

E. Abat et al. (**B. Belhorma, F. Chevallier, J.-Y. Hostachy, F. Ledroit-Guillon, A. Lucotte, F. Malek, M. Schaefer**) – Response and shower topology of 2 to 180 GeV pions measured with the ATLAS barrel calorimeter at the CERN test-beam and comparison to Monte Carlo simulations

C. Adloff et al. (**D. Dzahini, L. Gallin-Martel, J. Giraud, D. Grondin, J.-Y. Hostachy, K. Krastev, L. Morin, F.-E. Rarbi**) CALICE Collaboration – CALICE Report to the DESY Physics Research Committee, April 2011

### Théorie et phénoménologie

S. Dittmaier et al. (C. Weydert) – Handbook of LHC Higgs cross sections: 1. Inclusive observables. Report of the LHC Higgs Cross Section Working Group 161p. CERN-2011-002

### Pole accélérateur et sources d'ions

**F. Méot** – Principes d'un centre de hadronthérapie innovant, basé sur le synchrotron à champ fixe RACCAM

E. Biagini et al. (**M. Baylac, O. Bourrion, J.-M. De Conto, Y. Gomez, F. Méot, N. Monseu, D. Tourres, C. Vescovi**) – SuperB Progress Reports The collider Conceptual Design Report – 1009.6178

**T. Malkiewicz** et al. (**G. Simpson, M. Baylac, T. Cabanel, S. Chabod, M. Heusch, G. Kessedjian, M. Planet, M. Ramdhane**) – Measurement of fast and thermal neutron flux from the d + D reaction using the activation method, décembre 2011 6p.

## Notes techniques

**F. Méot** – Simulation of injection into EMMA, injection section 13p. – LPSC1033

**F. Méot** – Injection into EMMA, septum and kicker settings 38p. – LPSC1080

## Notes internes

**M. Baylac** – Consultation préliminaire de l'IRSN pour un accélérateur et des lignes de faisceau dédiées aux calibrations neutroniques, mars 2011 – 16p.

**C. Biscarat, B. Boucherin, S. Crépe-Renaudin, C. Gondrand, R. Guernane, F. Lambert**, les groupes ATLAS et ALICE du LPSC – Demande de passage à un nœud de type Tier-2 de WLCG pour le nœud de grille du Laboratoire de Physique Subatomique et de Cosmologie de Grenoble, décembre 2011 – 11p.

## Ouvrages scientifiques

A. Barrau et al. – Multivers. Mondes possibles de l'astrophysique, de la philosophie et de l'imaginaire – La Ville Brûle (2010) ISBN 9782360120130 Collection 360 9782100547838

A. Barrau, J. Grain – Relativité générale. Cours et exercices corrigés – Dunod (2011) Coll. Sciences Sup ISBN 9782100563166

A. Barrau, J.-L. Nancy – Dans quels mondes vivons-nous ? – Editions Galilée (2011) ISBN 9782718608532

## Directions d'ouvrages

A. Lucotte, F. Melot (ed.) – SOS'08 IN2P3 School of Statistics Proceedings – European Physical Journal Web of Conferences 4 (2010) ISBN 978-2-7598-0540-2

A. Barrau, D. Parrochia (ed.) – Forme et origine de l'univers. Regards philosophiques sur la cosmologie. – DUNOD (2010) ISBN 9782100547838

## Thèses

### 2010

L. Morin – Étude du calorimètre électromagnétique silicium-tungstène du concept de détecteur ILD pour l'ILC et mesure de la masse du boson de Higgs dans le canal  $e^+e^- \rightarrow Z H \rightarrow e^+e^- + X$  – 5 février 2010 – Dir. J.-Y. Hostachy

D. Boudemagh – Synthèse et étude de matériaux thermoélectriques du système  $Mg_2Si_{1-x}Sn_x$  – 30 mars 2010 – co-Dir. A. Lacoste

V. Drach – Fermions twistés et spectroscopie des baryons – 7 juin 2010 – Dir. J. Carbonell

J. Debove – Resommations QCD pour la production hadronique de jauginos – 8 septembre 2010 – Dir. M. Klasen

L. Fauvet – Préparation à l'analyse des données du satellite Planck: modélisation des émissions galactiques polarisées – 24 septembre 2010 – Dir. D. Santos, J. Macias Perez

X. Doligez – Influence du retraitement du sel combustible sur le MSFR et sur le dimensionnement de son unité de retraitement – 14 octobre 2010 – Dir. D. Heuer, E. Merle-Lucotte

P.-A. Harraud – Étude de la structure du nucléon par des calculs de QCD sur réseau – 3 novembre 2010 – Dir. J. Carbonell

D. Girard – Cosmologie observationnelle avec le satellite Planck: extraction du signal astrophysique des données brutes de l'instrument HFI et étude de l'effet du rayonnement cosmique réseau – 18 novembre 2010 – Dir. C. Renault

E.-E. Rarbi – Conception d'un convertisseur analogique numérique pipeline de grande dynamique et de faible consommation pour le codage des signaux de détecteurs à forte granularité – 22 novembre 2010 – Dir. D. Dzahini

A. Coly – Études expérimentales de sources d'ions RCE à 2,45 GHz pour la production de courants intenses – 15 décembre 2010 – Dir. T. Thuillier

M. Diers – Conception, étude et optimisation de nouvelles sources plasma à la résonance cyclotronique électronique. Application aux dépôts par voie chimique et par pulvérisation – 21 décembre 2010 – Dir. A. Lacoste, B. Schmidt

### 2011

Y. Mao – Mesure des corrélations gamma-hadrons et hadrons-hadrons dans les collisions pp à 7 TeV pour l'étude de la fragmentation des jets avec l'expérience ALICE du LHC – 3 juin 2011 – Dir. C. Furget, Y. Schutz

C. Weydert – Associated production of charged Higgs bosons and top quarks: from theory to experiment – 5 septembre 2011 – Dir. B. Clément, M. Klasen

J. Dumas – Feasibility studies of a polarized positron source based on the Bremsstrahlung of polarized electrons – 22 septembre 2011 – Dir. E. Voutier

S. Fichet – Aspects de théories unifiées en dimensions supplémentaires – 23 septembre 2011 – Dir. S. Kraml

A. Gorecki – Cosmologie observationnelle avec le télescope LSST. Élaboration du banc d'étalonnage de la caméra et simulation d'oscillations acoustiques de baryons – 4 octobre 2011 – Dir. A. Barrau

G. Regnard – Développement d'une nouvelle génération de plasmas micro-ondes à conditions opératoires élargies – 30 novembre 2011 – Dir. A. Lacoste

H. Le Quoc – Matériaux thermoélectriques du type  $Mg_2Si$ - $Mg_2Sn$  élaborés en couches minces par co-pulvérisation assistée par plasma – 21 décembre 2011 – Dir. A. Lacoste

## Habilitation à Diriger des Recherches

### 2010

J.-S. Réal – Contribution du quark étrange dans le nucléon – 12 février 2010

F. Mayet – Détection directionnelle de matière sombre galactique – 15 juillet 2010

S. Béchu – Caractérisations électrostatique et optique du fonctionnement de sources plasma micro-onde dipolaires. Application à la production de faisceaux d'électrons et d'ions  $H^-$  – 8 décembre 2010

J. Donini – Le Modèle Standard et la recherche de nouveaux phénomènes au Tevatron et au LHC – 13 décembre 2010

### 2011

J. Macias-Perez – Analyse et interprétation des observations du CMB avec Archeops et Planck – 29 avril 2011

G. Thiamova – Application of the algebraic methods to the description of nuclear collective motion – 23 juin 2011

## Distinctions

### 2010

Thierry Lamy (Cristal CNRS palmares 2010)

Aurélien Barrau (Médaille de l'Université Joseph Fourier 2010)

François Brut (Prix de la division enseignement-formation de la Société de chimie de France)

### 2011

Prix spécial du jury du Livre de l'Astronomie 2011 (Haute Maurienne Vanoise) pour le livre d'A. Barrau et al. Multivers - Mondes possibles de l'astrophysique, de la philosophie et de l'imaginaire, La Ville Brûle (2010) ISBN 978-2-36012-013-0

Pascal Sortais (LPSC) s'est vu remettre le jeudi 13 octobre durant les Rendez-Vous Carnot 2011, l'un des trois prix décerné par la Fédération des Industries Électriques, Électroniques et de Communication (FIEEC) - Recherche Appliquée. Ce prix concerne l'application des sources COMIC aux Focused Ion Beams (FIB). La société Orsay Physics ayant, suite à l'action de Pascal Sortais, intégré une source COMIC à une tête de FIB. Le premier client vient d'être livré.

Le Prix de la Fédération des Industries Électriques, Électroniques et de Communication (FIEEC) de la Recherche Appliquée aux PME-ETI, récompense des chercheurs travaillant dans des structures publiques de recherche et dont les travaux effectués en France ont été industrialisés dans une PMI-ETI dont le siège social est en France, ces PMI-ETI doivent avoir une activité dans le secteur des industries électriques, électroniques et de communication. La FIEEC, par sa commission PME-ETI, a créé ce prix annuel pour encourager le rapprochement des industries électriques, électroniques et de communication et le monde de la recherche.

