

Grand Accélérateur National d'Ions Lourds

**GANIL**

Laboratoire commun CEA / DSM - CNRS / IN<sup>2</sup>P<sup>3</sup>

GROUPE PHYSIQUE  
DOCUMENTATION



Edition du 13 janvier 2010

Date de début de la période : 1 janvier 2009

Date de fin de la période : 31 décembre 2009

Production Scientifique du GANIL : 157

Publications : 78

Actes de Conférences : 74

Rapports GANIL : 1

Thèses GANIL : 4

Thèses relatives au GANIL :

# NUCLEAR PHYSICS

## PUBLICATIONS

### **Shell Model in the Complex Energy Plane**

N. Michel, W. Nazarewicz, M. Ploszajczak, T. Vertse

**Journal of Physics G: Nuclear and Particle Physics 36 (2009) 013101**

<http://hal.in2p3.fr/in2p3-00331689/en/>

09 01 T

### **Absolute cross-sections from X – $\gamma$ coincidence measurements**

A. Lemasson, A. Shrivastava, A. Navin, M. Rejmund, V. Nanal, S. Bhattacharyya, A. Chatterjee, S. Kailas, K. Mahata, V.V. Parkar, R.G. Pillay, K. Ramachandran, P.C. Rout

**NIM A 598 (2009) 445-449**

<http://hal.in2p3.fr/in2p3-00348478/en/>

09 02 A

### **Fragment properties of fragmenting heavy nuclei produced in central and semi-peripheral collisions.**

E. Bonnet, B. Borderie, N. Le Neindre, M.-F. Rivet, R. Bougault, A. Chbihi, R. Dayras, J.D. Frankland, E. Galichet, F. Gagnon-Moisan, D. Guinet, P. Lattes, J. Lukasik, D. Mercier, M. Pârlog, E. Rosato, R. Roy, C. Sfonti, M. Vigilante, J.P. Wieleczko, B. Zwieglinski, INDRA - ALADIN Collaborations

**Nuclear Physics A 816 (2009) 1-18**

<http://hal.archives-ouvertes.fr/hal-00335974/en/>

09 03 A

### **Relevance of equilibrium in multifragmentation**

T. Furuta, A. Ono

**Physical Review C 79 (2009) 014608**

<http://hal.in2p3.fr/in2p3-00354796/en/>

09 04 T

### **Single-proton removal reaction study of $^{16}\text{B}$**

J.-L. Lecouey, N.A. Orr, F.M. Marqués, N.L. Achouri, J.-C. Angélique, B.A. Brown, F. Carstoiu, W.N. Catford, N.M. Clarke, M. Freer, B.R. Fulton, S. Grévy, F. Hanappe, K.L. Jones, M. Labiche, R.C. Lemmon, A. Ninane, E. Sauvan, K.M. Spohr, L. Stuttgé

**Physics Letters B 672 (2009) 6-11**

<http://hal.in2p3.fr/in2p3-00259696/en/>

09 05 A

### **The $^8\text{He}$ and $^{10}\text{He}$ spectra studied in the (t,p) reaction**

M.S. Golovkov, L.V. Grigorenko, G.M. Ter-Akopian, A.S. Fomichev, Yu.Ts. Oganessian, V.A. Gorshkov, S.A. Krupko, A.M. Rodin, S.I. Sidorchuk, R.S. Slepnev, S.V. Stepantsov, R. Wolski, D.Y. Pang, V. Chudoba, A.A. Korshennikov, E.A. Kuzmin, E.Yu. Nikolskii, B.G. Novatskii, D.N. Stepanov, P. Roussel-Chomaz, W. Mittig, A. Ninane, F. Hanappe, L. Stuttgé, A.A. Yukhimchuk, V.V. Perevozchikov, Yu.I. Vinogradov, S.K. Grishechkin, S.V. Zlatoustovskiy

**Physics Letters B 672 (2009) 22-29**

<http://hal.in2p3.fr/in2p3-00355548/en/>

09 06 A

### **Density matrix functional theory for the Lipkin model**

D. Lacroix

**Physical Review C 79, 014301 (2009)**

<http://hal.in2p3.fr/in2p3-00348461/en/>

09 10 T

### **Density matrix renormalization group approach to two-fluid open many-fermion systems**

J. Rotureau, N. Michel, W. Nazarewicz, M. Płoszajczak, J. Dukelsky

**Physical Review C 79, 014304 (2009)**

<http://hal.in2p3.fr/in2p3-00327096/en/>

09 11 T

### **Spectroscopy of <sup>52,53</sup>Sc**

S. Bhattacharyya, M. Rejmund, A. Navin, E. Caurier, F. Nowacki, A. Poves, R. Chapman

D. O'Donnell, M. Gelin, A. Hodsdon, X. Liang, W. Mittig, G. Mukherjee F. Rejmund,

M. Rousseau, P. Roussel-Chomaz, K.-M. Spohr, Ch. Theisen

**Physical Review C 79, 014313 (2009)**

<http://hal.in2p3.fr/in2p3-00357825/en/>

09 12 A

### **Low-energy Coulomb excitation of neutron-rich zinc isotopes**

J. Van de Walle, F. Aksouh, T. Behrens, V. Bildstein, A. Blazhev, J. Cederkall, E. Clément,

T. E. Cocolios, T. Davinson, P. Delahaye, J. Eberth, A. Ekström, D. V. Fedorov,

V. N. Fedosseev, L. M. Fraile, S. Franchoo, R. Gernhauser, G. Georgiev, D. Habs, K. Heyde,

G. Huber M. Huyse, F. Ibrahim, O. Ivanov, J. Iwanicki, J. Jolie, O. Kester, U. Köster, T. Kröll,

R. Krücken, M. Lauer, A. F. Lisetskiy, R. Lutter, B. A. Marsh, P. Mayet, O. Niedermaier,

M. Pantea, R. Raabe, P. Reiter, M. Sawicka, H. Scheit, G. Schrieder, D. Schwalm,

M. D. Seliverstov, T. Sieber, G. Sletten, N. Smirnova, M. Stanoiu, I. Stefanescu, J.-C. Thomas, J. J.

Valiente-Dobon, P. Van Duppen, D. Verney, D. Voulot, N. Warr, D. Weisshaar,

F. Wenander, B. H. Wolf, M. Zielinska

REX-ISOLDE Collaboration

**Physical Review C 79, 014309 (2009)**

<http://hal.in2p3.fr/in2p3-00358075/en/>

09 13 A

### **One-body energy dissipation in fusion reactions from mean-field theory**

K. Washiyama, D. Lacroix, S. Ayik

**Physical Review C 79, 024609 (2009)**

<http://hal.in2p3.fr/in2p3-00341836/en/>

09 16 T

### **Global optical model potential for A = 3 projectiles**

D.Y. Pang, P. Roussel-Chomaz, H. Savajols, R.L. Varner, R. Wolski

**Physical Review C 79, 024615 (2009)**

<http://hal.in2p3.fr/in2p3-00365132/en/>

09 17 T

**Criticality in the configuration-mixed interacting boson model:  $(2) Q^{\chi_1} Q^{\chi_1} - Q^{\chi_2} Q^{\chi_2}$  mix**

V. Hellemans, P. Van Isacker, S. De Baerdemacker, K. Heyde

**Nuclear Physics A 819 (2009) 11–26**

<http://hal.in2p3.fr/in2p3-00343245/en/>

09 18 T

**New digital techniques applied to A and Z identification using pulse shape discrimination of silicon detector current signals**

S. Barlini, R. Bougault, Ph. Laborie, O. Lopez, D. Mercier, M. Parlog, B. Tamain, E. Vient, E. Chevallier, A. Chbihi, B. Jacquot, V. L. Kravchuk

**Nuclear Instruments and Methods in Physics Research A 600 (2009) 644–650**

<http://hal.in2p3.fr/in2p3-00363510/en/>

09 19 A

**Shell Erosion and Shape Coexistence in  $^{43}_{16}\text{S}_{27}$**

L. Gaodefroy, J. M. Daugas, M. Hass, S. Grevy, Ch. Stodel, J. C. Thomas, L. Perrot, M. Girod, B. Rosse, J. C. Angélique, D. L. Balabanski, E. Fiori, C. Force, G. Georgiev, D. Kameda, V. Kumar, R. L. Lozeva, I. Matea, V. Méot, P. Morel, B. S. Nara Singh, F. Nowacki, G. Simpson

**Physical Review Letters 102, 092501 (2009)**

<http://hal.in2p3.fr/in2p3-00365309/en/>

09 20 A

**Partial Dynamical Symmetry in Quantum Hamiltonians with Higher-Order Terms**

J. E. Garcia-Ramos, A. Leviatan, P. Van Isacker

**Physical Review Letters 102 (2009) 112502**

<http://hal.in2p3.fr/in2p3-00349047/en/>

09 26 T

**Mass of  $^{11}\text{Li}$  from the  $^1\text{H}(^{11}\text{Li}, ^9\text{Li})^3\text{H}$  reaction**

T. Roger, H. Savajols, I. Tanihata, W. Mittig, M. Alcorta, D. Bandyopadhyay, R. Bieri, L. Buchmann, M. Caamano, B. Davids, N. Galinski, A. Gallant, D. Howell, R. Kanungo, W. Mills, S. Mythili, M. Notani, R. Openshaw, E. Padilla-Rodal, P. Roussel-Chomaz, G. Ruprecht, G. Savard, G. Sheffer, A. C. Shotter, M. Trinczek, P. Walden

**Physical Review C 79, 034318 (2009)**

<http://hal.in2p3.fr/in2p3-00372429/en/>

09 35 A

**Nuclear “bubble” structure in  $^{34}\text{Si}$**

M. Grasso, L. Gaodefroy, E. Khan, T. Niksic, J. Piekarewicz, O. Sorlin, N. Van Giai, D. Vretenar

**Physical Review C 79, 034318 (2009)**

<http://hal.in2p3.fr/in2p3-00372433/en/>

09 36 T

**Isotopic Dependence of the Nuclear Caloric Curve**

C. Sienti, P. Adrich, T. Aumann, C.O. Bacri, T. Barczyk, R. Bassini, S. Bianchin, C. Boiano, A.S. Botvina, A. Boudard, J. Brzychczyk, A. Chbihi, J. Cibor, B. Czech, M. De Napoli, J.-E. Ducret, H. Emling, J.D. Frankland, M. Hellstrom, D. Henzlova, G. Imme, I. Iori, H. Johansson, K. Kezzar, A. Lafriakh, A. Le Fevre, E. Le Gentil, Y. Leifels, J. Luhnig, J. Łukasik, W. G. Lynch, U. Lynen, Z. Majka, M. Mocko, W.F.J. Muller, A. Mykulyak, H. Orth, A.N. Otte, R. Palit, P. Pawłowski, A. Pullia, G. Raciti, E. Rapisarda, H. Sann, C. Schwarz, H. Simon, K. Summerer, W. Trautmann, M. B. Tsang,

G. Verde, C. Volant, M. Wallace, H. Weick, J. Wiechula, A. Wieloch, B. Zwieglinski

**Physical Review Letters 102, 152701 (2009)**

<http://hal.in2p3.fr/in2p3-00367337/en/>

09 56 A

**EURISOL Design Study: Toward the Ultimate ISOL facility for Europe**

Y. Blumenfeld, P. Butler, J. Cornell, G. Fortuna, M. Lindroos

**Nuclear Physics News 19 (2009) 22-27**

<http://hal.in2p3.fr/in2p3-00376903/fr/>

09 57 A

**Discovery of a new broad resonance in  $^{19}\text{Ne}$ : Implications for the destruction of the cosmic  $\gamma$ -ray emitter  $^{18}\text{F}$**

J.C. Dalouzy, L. Achouri, M. Aliotta, C. Angulo, H. Benhabiles, C. Borcea, R. Borcea, P. Bourgault, A. Buta, A. Coc, A. Damman, T. Davinson, F. de Grancey, F. de Oliveira Santos, N. de Sereville, J. Kiener, M.G. Pellegriti, F. Negoita, A.M. Sanchez-Benitez, O. Sorlin, M. Stanoiu, I. Stefan, P.J. Woods

**Physical Review Letters 102, 152701 (2009)**

<http://hal.in2p3.fr/in2p3-00370811/en/>

09 58 A

**IBM-1 calculations towards the neutron-rich nucleus  $^{106}\text{Zr}$**

S. Lalkovski and P. Van Isacker

**Physical Review C 79, 044307 (2009)**

<http://hal.in2p3.fr/in2p3-00369567/en/>

09 64 T

**Configuration mixing within the energy density functional formalism: Removing spurious contributions from nondiagonal energy kernels**

D. Lacroix, T. Duguet, and M. Bender

**Physical Review C 79, 044318 (2009)**

<http://hal.in2p3.fr/in2p3-00321214/en/>

09 65 T

**Particle-number restoration within the energy density functional formalism**

M. Bender, T. Duguet, and D. Lacroix

**Physical Review C 79, 044319 (2009)**

<http://hal.in2p3.fr/in2p3-00321220/en/>

09 66 T

**Particle-number restoration within the energy density functional formalism: Nonviability of terms depending on noninteger powers of the density matrices**

T. Duguet, M. Bender, K. Bennaceur, D. Lacroix, and T. Lesinski

**Physical Review C 79, 044320 (2009)**

<http://hal.in2p3.fr/in2p3-00321224/en/>

09 67 T

**Neutron yield from carbon, light- and heavy-water thick targets irradiated by 40 MeV deuterons**  
G. Lhersonneau, T. Malkiewicz, K. Kolos, M. Fasil, H. Kettunen, M.G. Saint-Laurent<sup>1</sup>, A. Pichard<sup>1</sup>,  
W.H. Trzaska, G. Tyurin, L. Cousin  
**NIM A 603 (2006) 228-235**  
<http://hal.in2p3.fr/in2p3-00382700/en/>  
09 70 A

**The interacting boson model for exotic nuclei**  
P. Van Isacker  
**Rivista del Nuovo Cimento 32 (2009) 71-104**  
<http://hal.in2p3.fr/in2p3-00382692/en/>  
09 71 T

**Probing neutron correlations through nuclear breakup**  
M. Assié, D. Lacroix  
**Physical Review Letters (2009) 202501**  
<http://hal.in2p3.fr/in2p3-00351191/en/>  
09 73 T

**Fission times of excited nuclei: An experimental overview**  
D. Jacquet, M. Morjean  
**Progress in Particle and Nuclear Physics 63 (2009) 155-185**  
<http://hal.in2p3.fr/in2p3-00392589/en/>  
09 74 A

**Fluctuation and dissipation dynamics in fusion reactions from stochastic mean-field approach**  
S. Ayik, K. Washiyama, D. Lacroix  
**Physical Review C 79 (2009) 054606**  
<http://hal.in2p3.fr/in2p3-00358844/en/>  
09 75 T

**Global investigation of the fine structure of the isoscalar giant quadrupole resonance**  
A. Shevchenko, O. Burda, J. Carter, G. R. J. Cooper, R. W. Fearick, S. V. Föortsch, H. Fujita, Y. Fujita, Y. Kalmykov, D. Lacroix, J. J. Lawrie, P. von Neumann-Cosel, R. Neveling, V. Yu. Ponomarev, A. Richter, E. Sideras-Haddad, F. D. Smit, J. Wambach  
**Physical Review C 79, 044305 (2009)**  
<http://hal.in2p3.fr/in2p3-00399375/en/>  
09 80 A

**Isospin diffusion in <sup>58</sup>Ni-induced reactions at intermediate energies. I. Experimental results**  
E. Galichet, M. F. Rivet, B. Borderie, M. Colonna, R. Bougault, A. Chbihi, R. Dayras, D. Durand, J. D. Frankland, D. C. R. Guinet, P. Loutesse, N. Le Neindre, O. Lopez, L. Manduci, M. Parlog, E. Rosato, B. Tamain, E. Vient, C. Volant, J. P. Wieleczo  
**Physical Review C 79, 064614 (2009)**  
<http://hal.archives-ouvertes.fr/hal-00347268/en/>  
09 86 A

**Precision measurement of the electric quadrupole moment of  $^{31}\text{Al}$  and determination of the effective proton charge in the sd-shell**

M. De Rydt, G. Neyens, K. Asahi, D.L. Balabanski, J.M. Daugas, M. Depuydt, L. Gaudefroy, S. Grévy, Y. Hasama, Y. Ichikawa, P. Morel, T. Nagatomo, T. Otsuka, L. Perrot, K. Shimada, Ch. Stödel, J.C. Thomas, H. Ueno, Y. Utsuno, W. Vanderheijden, et al.

**Physics Letters B 678 (2009) 344-349**

<http://hal.in2p3.fr/in2p3-00397999/en/>

09 87 A

**On the shape of  $^{44}\text{Ar}$ : Onset of deformation in neutron-rich nuclei near  $^{48}\text{Ca}$**

M. Zielinska, A. Görgen, E. Clément, J.-P. Delaroche, M. Girod, W. Korten, A. Bürger, W. Catford, C. Dossat, J. Iwanicki, J. Libert, J. Ljungvall, P.J. Napiorkowski, A. Obertelli, D. Pietak, R. Rodriguez-Guzman, G. Sletten, J. Srebrny, Ch. Theisen, and K. Wrzosek

**Physical Review C (2009) 014307**

<http://hal.in2p3.fr/in2p3-00403065/en/>

09 89 A

**The use of EXOGAM for in-beam spectroscopy of proton drip-line nuclei with radioactive ion beams**

M. Petri, E.S. Paul, P.J. Nolan, A.J. Boston, H.C. Boston, R.J. Cooper, M.R. Dimmock, S. Gros, B.M. McGuirk, G. Turk, D. Guinet, Ph. Loutesse, M. Meyer, N. Redon, B. Rossé, Ch. Schmitt, O. Stézowski, S. Bhattacharyya, G. De France, G. Mukherjee, et al.

**NIM A 607 (2009) 412-420**

<http://hal.in2p3.fr/in2p3-00400166/en/>

09 90 A

**Collision Dynamics of Two  $^{238}\text{U}$  Atomic Nuclei**

C. Golabek, C. Simenel

**Physical Review Letters 103 (2009) 042701**

<http://hal.archives-ouvertes.fr/hal-00376996/fr/>

09 91 T

**The Silicon Cube detector**

I. Matea, N. Adimi, B. Blank, G. Canchel, J. Giovinazzo, M.J.G. Borge, R. Domínguez-Reyes, O. Tengblad, J.-C. Thomas

**NIM A 607 (2009) 576-580**

<http://hal.in2p3.fr/in2p3-00397517/en/>

09 92 A

**Bimodal Behavior of the Heaviest Fragment Distribution in Projectile Fragmentation**

E. Bonnet, D. Mercier, B. Borderie, F. Gulminelli, M. F. Rivet, B. Tamain, R. Bougault, A. Chbihi, R. Dayras, J. D. Frankland, E. Galichet, F. Gagnon-Moisan, D. Guinet, P. Loutesse, J. Łukasik, N. Le Neindre, M. Parlog, E. Rosato, R. Roy, M. Vigilante, J. P. Wieleczko, B. Zwieglinski (INDRA and ALADIN Collaborations)

**Physical Review Letters 103 (2009) 072701**

<http://hal.archives-ouvertes.fr/hal-00345772/fr/>

09 94 A

**Unexpected features of quantum degeneracies in a pairing model with two integrable limits**

J Dukelsky, J Okolowicz, M Ploszajczak

**Journal of Statistical Mechanics : Theory and Experiment (2009) L07001**

<http://hal.in2p3.fr/in2p3-00416376>

09 103 T

**Mass dispersion in transfer reactions with a stochastic mean-field theory**

K. Washiyama, S. Ayik, D. Lacroix

**Physical Review C 80 (2009) 031602(R)**

<http://hal.in2p3.fr/in2p3-00398839>

09 104 T

**g factors of  $^{17}\text{N}$  and  $^{18}\text{N}$  remeasured**

M. De Rydt, D.L. Balabanski, J.M. Daugas, P. Himpe, D. Kameda, R. Lozeva, P. Morel, L. Perrot, K. Shimada, C. Stodel, T. Sugimoto, J.C. Thomas, H. Ueno, N. Vermeulen, P. Vingerhoets, A. Yoshimi, G. Neyens

**Physical Review C 80 (2009) 037306**

<http://hal.in2p3.fr/in2p3-00421204>

09 105 A

**$\beta$ -decay study of  $^{77}\text{Cu}$**

N. Patronis, H. De Witte, M. Gorska, M. Huyse, K. Kruglov, D., Pauwels, K. Van de Vel, P. Van Duppen, J. Van Roosbroeck, J.-C. Thomas, S. Franchoo, J. Cederkall, V.N. Fedoseyev, H. Fynbo, U. Georg, O. Jonsson, U. Koster, T. Materna, L. Mathieu, O. Serot, L. Weissman and W.F. Mueller, V.I. Mishin, D. Fedorov

**Physical Review C 80 (2009) 034307**

<http://hal.in2p3.fr/in2p3-00412556/fr/>

09 106 A

**Exceptional points in the scattering continuum**

J. Okolowicz, M. Ploszajczak

**Physical Review C 80 (2009) 034619**

<http://hal.in2p3.fr/in2p3-00421197/fr/>

09 107 T

**Analysis of the Fusion Hindrance in Mass-symmetric Heavy Ion Reactions**

C. Shen, Y. Abe, Q. Li, D. Boilley

**Science in China Series G-Physics Mechanics & Astronomy 52 (10) (2009)1458-1463**

<http://hal.in2p3.fr/in2p3-00399270>

09 108 T

**Splitting of the pygmy dipole resonance in  $^{138}\text{Ba}$  and  $^{140}\text{Ce}$  observed in the  $(\alpha, \alpha \gamma)$  reaction**

J. Endres, D. Savran, A.M. Van Den Berg, P. Dendooven, M. Fritzsche, M.N. Harakeh, J. Hasper, H.J. Wörtche, A. Zilges

**Physical Review C 80 (2009) 034302**

<http://hal.in2p3.fr/in2p3-00421874>

09 109 A

### **Breakdown of the $Z = 8$ Shell Closure in Unbound $^{12}\text{O}$ and its Mirror Symmetry**

D. Suzuki, H. Iwasaki, D. Beaumel, L. Nalpas, E. Pollacco, M. Assié, H. Baba, Y. Blumenfeld, N. De Séréville, A. Drouart, S. Franchoo, A. Gillibert, J. Guillot, F. Hammache, N. Keeley, V. Lapoux, F. Maréchal, S. Michimasa, X. Mougeot, I. Mukha, H. Okamura, H. Otsu, A. Ramus, P. Roussel-Chomaz, H. Sakurai, J.-A. Scarpaci, O. Sorlin, I. Stefan, M. Takechi

**Physical Review Letters 103 (2009) 152503**

<http://hal.in2p3.fr/in2p3-00423559>

09 110 A

### **Soft Dipole Mode in $8\text{He}$**

L.V. Grigorenko, M.S. Golovkov, G.M. Ter-Akopian, A.S. Fomichev, Yu.Ts. Oganessian, V. A. Gorshkov, S. A. Krupko, A. M. Rodin, S. I. Sidorchuk, R. S. Slepnev, S. V. Stepantsov, R. Wolski, D. Y. Pang, V. Chudoba, A.A. Korshennikov, E. A. Kuzmin, E.Yu. Nikolskii, B.G. Novatskii, D.N. Stepanov, P. Roussel-Chomaz, W. Mittig, A. Ninane, F. Hanappe, L. Stuttgé, A.A. Yukhimchuk, V.V. Perevozchikov, Yu.I. Vinogradov, S. K. Grishechkin, S.V. Zlatoustovskiy

**Physics of Particles and Nuclei Letters 6 (2009) 118-125**

<http://hal.in2p3.fr/in2p3-00423613/fr>

09 111 A

### **Bimodality - a general feature of heavy ion reactions**

A. Le Fevre, J. Aichelin, C. Hartnack, J. Lukasik, W. F.J. Mueller, H. Orth, C. Schwarz, C. Sienti, W. Trautmann, K. Turzo, B. Zwieglinski, A. Chbihi, J. D. Frankland, J. P. Wieleczko, M. Vigilante, ALADIN, INDRA Collaboration(s)

**Physical Review C 80 (2009) 044615**

<http://hal.in2p3.fr/in2p3-00419739/fr/>

09 112 A

### **Indirect determination of the $^{230}\text{Th}(n, f)$ and $^{231}\text{Th}(n, f)$ cross sections for thorium-based nuclear energy systems**

B. L. Goldblum, S. R. Stroberg, J. M. Allmond, C. Angell, L. A. Bernstein, D. L. Bleuel, J. T. Burke, J. Gibelin, L. Phair, N.D. Scielzo, E. Swanberg, M. Wiedeking, E.B. Norman

**Physical Review C 80 (2009) 044610**

<http://hal.in2p3.fr/in2p3-00431896>

09 115 A

### **Proton decay from the isoscalar giant dipole resonance in $^{58}\text{Ni}$**

M. Hunyadi, H. Hashimoto, T. Li, H. Akimune, H. Fujimura, M. Fujiwara, Z. Gacsi, U. Garg, K. Hara, M.N. Harakeh, J. Hoffman, M. Itoh, T. Murakami, K. Nakanishi, B. K. Nayak, S. Okumura, H. Sakaguchi, S. Terashima, M. Uchida, Y. Yasuda, and M. Yosoi

**Physical Review C 80 (2009) 044317**

<http://hal.in2p3.fr/in2p3-00432088>

09 117 A

### **Nuclear Data Sheets for $A = 84$**

D. Abriola, M. Bostan, S. Erturk, M. Fadill, M. Galane, S. Juutinen, T. Kibédi, F. Kondev, A. Luca, A. Negreti, Ninel Nica, B. Pfeiffer, Balraj Singh, A. Sonzogni, J. Timar, J. Tuli, T. Venkovao, K. Zuber

**Nuclear Data Sheets 110 (2009) 2815-2944**

<http://hal.in2p3.fr/in2p3-00432951/fr/>

09 122 A

### **Shell corrections to a liquid-drop description of nuclear masses and radii**

A.E.L. Dieperink, P. Van Isacker

**The European Physical Journal A 42 (2009) 269-279**

<http://hal.in2p3.fr/in2p3-00428937>

09 123 T

### **Prompt $\gamma$ -ray spectroscopy of isotopically identified fission fragments**

A. Shrivastava, M. Caamano, M. Rejmund, A. Navin, F. Rejmund, K.-H. Schmidt, A. Lemasson, C. Schmitt, L. Gaudefroy, K. Sieja, L. Audouin, C. O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, X. Derkx, B. Fernandez-Dominguez, C. Golabek, B. Jurado, T. Roger, J. Taieb

**Physical Review C 80 (2009) 051305(R)**

<http://hal.in2p3.fr/in2p3-00436389>

09 124 A

### **A new dedicated $\beta$ -NMR/ $\beta$ -NQR setup for LISE-GANIL**

M. De Rydt, R. Lozeva, N. Vermeulen, F. De Oliveira Santos, S. Grévy, P. Himpe, C. Stodel, J.C. Thomas, P. Vingerhoets, G. Neyens

**NIM A 512 (2009) 112-121**

<http://hal.in2p3.fr/in2p3-00423654>

09 125 A

### **Modern Rutherford Experiment: Tunneling of the Most Neutron-Rich Nucleus**

A. Lemasson, A. Shrivastava, A. Navin, M. Rejmund, N. Keeley, V. Zelevinsky, S. Bhattacharyya, A. Chatterjee, G. de France, B. Jacquot, V. Nanal, R. G. Pillay, R. Raabe, C. Schmitt

**Physical Review Letters 103 (2009) 232701**

<http://hal.in2p3.fr/in2p3-00433528/fr/>

09 126 A

### **Exploring fusion at extreme sub barrier energies with weakly bound nuclei**

A. Shrivastava, A. Navin, A. Lemasson, K. Ramachandran, V. Nanal, M. Rejmund, K. Hagino, T. Ichikawa, S. Bhattacharyya, A. Chatterjee, S. Kailas, K. Mahata, V.V. Parkar, R.G. Pillay, P.C. Rout

**Physical Review Letters 103 (2009) 232702**

<http://hal.in2p3.fr/in2p3-00436084/fr/>

09 128 A

### **Charge correlations and isotopic distributions of projectile fragmentation events in**

**$^{124}\text{Xe} + ^{112}\text{Sn}$  at  $E/A = 50$  MeV**

S. Hudan,\* A. B. McIntosh, J. Black, D. Mercier, C. J. Metelko, R. Yanez, R. T. de Souza

A. Chbihi, M. Famiano, M. O. Fregeau, J. Gauthier, J. Moisan, R. Roy, S. Bianchin, C. Schwarz, W. Trautmann, A. S. Botvina

**Physical Review C 80, 064611 (2009)**

<http://hal.in2p3.fr/in2p3-00443731>

09 129 A

### **Image reconstruction of nuclear masses**

Morales, I. O.; Mendoza-Temis, J.; Barea, J.; Frank, A.; Hirsch, J. G.; Lopez Vieyra, J. C.; Van Isacker, P.; Velazquez, V.

**Revista Mexicana de Fisica 55 (2): 98-102 Suppl. S DEC 2009**

<http://hal.in2p3.fr/in2p3-00445496/fr/>

09 153 T

## **CONFERENCES PROCEEDINGS**

### **Robust Calculation of Nuclear Masses by means of Image Reconstruction**

I. Morales, J. Mendoza-Temis, J. Barea, J. G. Hirsch, J. C. López Vieyra, P. Van Isacker, V. Velazquez

#### **AIP Conférence Proceedings 1090 (2009) 246-252**

Capture gamma-Ray Spectroscopy and related Topics : Proceedings of the 13th International Symposium on Capture gamma-Ray Spectroscopy and related Topics, Cologne (Germany) 25-29 août 2008.

<http://hal.in2p3.fr/in2p3-00368786/en/>

09 24 T

### **Measurement of the Gamow-Teller Branching Ratio in the beta-Decay of $^{21}\text{Na}$**

N.L. Achouri, J.-C. Angélique, G. Ban, B. Bastin, B. Blank, S. Dean, P. G. Dendooven, J. Giovinazzo, S. Grévy, K. Jungmann, B. Laurent, F. E. Liénard, O. Naviliat-Cuncic, N. A. Orr1, A. Rogachevskiy, M. Sohani, E. Traykov, H. Wilschut

#### **AIP Conférence Proceedings 1090 (2009) 362-366**

Capture gamma-Ray Spectroscopy and related Topics : Proceedings of the 13th International Symposium on Capture gamma-Ray Spectroscopy and related Topics, Cologne (Germany) 25-29 août 2008.

<http://hal.in2p3.fr/in2p3-00368796/en/>

09 25 A

### **Features of exceptional points and the continuum spectroscopy**

J. Okolowicz, M. Ploszajczak

#### **Acta Physica Polonica B 40 (2009) 409**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00341827/en/>

09 28 T

### **Recent results from GANIL**

S. Franchoo, N.L. Achouri, A. Algora, A. Al-Khatib, J.-C. Angélique, F. Azaiez, D. Baiborodin, B. Bastin, D. Beaumel, M. Belleguic, G. Benzoni, Y. Blumenfeld, C. Borcea, R. Borcea, C. Bourgeois, P. Bringel, B.A. Brown, A. Bürger, A. Buta, R. Chapman, E. Clément, J.-C. Dalouzy, Z. Dlouhy, Z. Dombradi, A. Drouart, Z. Elekes, C. Engelhardt, S. Fortier, Z. Fülöp, L. Gaudefroy, M. Gélín, J. Gibelin, A. Görge, S. Grévy, D. Guillemaud-Mueller, F. Hammache, H. Hübel, S. Iacob, F. Ibrahim, K. Kemper, A. Kerek, W. Korten, A. Krasznahorkay, K.-L. Kratz, B. Laurent, M. Lazar, D. Lebhertz, M. Lewitowicz, X. Liang, E. Liénard, S. Lukyanov, S. Mandal, C. Monrozeau, J. Mrazek, L. Nalpas, A. Navin, F. Negoita, F. Nowacki, N. Orr, A. Ostrowski, T. Otsuka, D. Pantelica, Y. Penionzhkevich, J. Piekarewicz, Z. Podolyak, E. Pollacco, F. Pougheon, A. Poves, F. Rotaru, P. Roussel-Chomaz, E. Rich, J.-A. Scarpaci, M.-G. Saint-Laurent, H. Savajols, G. Sletten, D. Sohler, O. Sorlin, M. Stanoiu, I. Stefan, T. Suzuki, C. Theisen, J. Timar, C. Timis, E. Tryggestad, D. Verney, S. Williams, A. Yamamoto

#### **Acta Physica Polonica B 40 (2009) 419**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00371724/en/>

09 29 A

### **The PARIS project**

A. Maj, F. Azaiez, D. Jenkins, Ch. Schmitt, O. Stezowski, J.P. Wieleczko, D. Balabanski, P. Bednarczyk, S. Brambilla, F. Camera, D.R. Chakrabarty, M. Chełstowska, M. Ciemała, S. Courtin, M. Csatlos, Z. Dombradi, O. Dorvaux, J. Dudek, M.N. Erduran, S. Ertürk, B. Fornal, S. Franchoo, G. Georgiev, J. Gulyás, S. Harissopoulos, P. Joshi, M. Kicińska-Habior, M. Kmiecik, A. Krasznahorkay, G. Anil Kumar, Suresh Kumar, M. Labiche, I. Mazumdar, K. Mazurek, W. Męczyński, S. Myalski, V. Nanal, P. Napiorkowski, J. Peyre, J. Pouthas, O. Roberts, M. Rousseau, J.A. Scarpaci, A. Smith, I. Stefan, J. Strachan, D. Watts, M. Ziębliński

**Acta Physica Polonica B 40 (2009) 565**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00371731/en/>

09 30 A

### **N/Z influence on disintegration modes of compound nuclei**

J.P. Wieleczko, E. Bonnet, J. Gomez del Campo, M. La Commara, M. Vigilante, J.D. Frankland, A. Chbihi, E. Rosato, A. Galindo-Uribarri, D. Shapira, G. Spadaccini, R. Bougault, C. Beck, B. Borderie, R. Dayras, G. De Angelis, Ph. Loutesse, N. Le Neindre, L. Nalpas, A.D. Onofrio, M. Parlog, D. Pierroutsakou, F. Rejmund, M.F. Rivet, M. Romoli, R. Roy, B. Tamain

**Acta Physica Polonica B 40 (2009) 565**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00329356/en/>

09 31 A

### **Gas scintillation chamber for superheavy elements detection at GANIL**

Z. Sosin, A. Wieloch, J. Péter, A. Drouart, R. Dayras, K. Łojek, C. Stodel, M. Adamczyk, A. Gonciarz, P. Bańka, P. Lasko, L. Zosiak, N. Alamanos, N. Amar, R. Anne, J.C. Angélique, G. Auger, J.M. Fontbonne, A. Gillibert, S. Grévy, F. Hanappe, F. Hannachi, R. Hue, A. Khouaja, T. Legou, A. Lopez-Martens, E. Liénard, L. Manduci, F. de Oliveira Santos, G. Politi, M.G. Saint-Laurent, L. Stuttgé, J. Tillier, R. de Turreil, A.C.C. Villari, J.P. Wieleczko

**Acta Physica Polonica B 40 (2009) 741**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00371740/en/>

09 32 A

### **The SPIRAL2 project : physics and challenges**

M. Lewitowicz

**Acta Physica Polonica B 40 (2009) 811**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00329294/en/>

09 33 A

### **Low-Energy Spectra of $^8\text{He}$ and $^{10}\text{He}$ Studied in (t,p) Type Reactions in Inverse Kinematics**

V. Chudoba, A.S. Fomichev, M.S. Golovkov, V.A. Gorshkov, S.A. Krupko et al

**Acta Physica Polonica B 40 (2009) 899**

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne

<http://hal.in2p3.fr/in2p3-00373460/en/>

09 34 A

### **Influence of the N/Z ratio on disintegration modes of compound nuclei**

J.P. Wieleczko, E. Bonnet, J. Gomez Del Campo, M. La Commara, M. Vigilante, J.D. Frankland, A. Chbihi, E. Rosato, G. Spadaccini, A. Galindo-Uribarri, D. Shapira, C. Beck, B. Borderie, R. Bougault, R. Dayras, G. De Angelis, P. Lattes, N. Le Neindre, A. D'Onofrio, M. Parlog, D. Pierroutsakou, F. Rejmund, M.F. Rivet, M. Romoli, R. Roy

**AIP Conference Proceedings 1098 (2009) 64-69**

FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00375772/en/>

09 52 A

### **Extraction of nucleus-nucleus potential and energy dissipation from dynamical mean-field theory**

K. Washiyama, D. Lacroix

**AIP Conference Proceedings 1098 (2009) 70-75**

FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00341683/en/>

09 53 T

### **Exact Stochastic Mean-Field dynamics**

Lacroix D., Hupin G.

**AIP Conference Proceedings 1098 (2009) 128-132**

FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00348464/en/>

09 54 T

### **Transfer and breakup of light weakly-bound nuclei**

Raabe R.

**AIP Conference Proceedings 1098 (2009) 257-263**

FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00340541/en/>

09 55 A

### **Isotopic dependence of the caloric curve**

W. Trautmann, P. Adrich, T. Aumann, C.O. Bacri, T. Barczyk, R. Bassini, S. Bianchin, C. Boiano, A.S. Botvina, A. Boudard, J. Brzychczyk, A. Chbihi, J. Cibor, B. Czech, M. De Napoli, J.-É. Ducret, H. Emling, J.D. Frankland, M. Hellström, D. Henzlova, G. Immè, I. Iori, H. Johansson, K. Kezzar, A. Lafriakh, A. Le Fèvre, E. Le Gentil, Y. Leifels, J. Lühning, J. Lukasik, W.G. Lynch, U. Lynen, Z. Majka, M. Mocko, W.F.J. Müller, A. Mykulyak, H. Orth, A.N. Otte, R. Palit, P. Pawowski, A. Pullia, G. Raciti, E. Rapisarda, H. Sann, C. Schwarz, C. Sfienti, H. Simon, K. Sümmerer, M.B. Tsang, G. Verde, C. Volant, M. Wallace, H. Weick, J. Wiechula, A. Wieloch, B. Zwiernicki

**Progress in Particle and Nuclear Physics 62 (2009) 407-412**

International Workshop on Nuclear Physics 30th Course - Heavy-Ion Collisions from the Coulomb Barrier to the Quark-Gluon Plasma, Erice : Italie (2008)

<http://hal.in2p3.fr/in2p3-00377878/en/>

09 59 A

### **Dynamical Signals in Fragmentation Reactions: Time Scale Determination from Three Fragments Correlations by Using the 4 $\pi$ CHIMERA Multidetector**

E. De Filippo, F. Amorini, A. Anzalone, L. Auditore, V. Baran, I. Berceanu, J. Blicharska, B. Borderie<sup>1</sup>, R. Bougault, M. Bruno, J. Brzychczyk, G. Cardella, S. Cavallaro, M.B. Chatterjee, A. Chbihi, M. Colonna, M. D'Agostino, R. Dayras, M. Di Toro, U. Emanuele, J. Frankland, E. Galichet, W. Gawlikowicz, E. Geraci, F. Giustolisi, L. Grassi, A. Grzeszczuk, P. Guazzoni, D. Guinet, S. Kowalski, E. La Guidara, G. Lanzalone, G. Lanzañ, N. Le Neindre, I. Lombardo, C. Maiolino, Z. Majka, A. Pagano, M. Papa, M. Petrovici, E. Piasecki, S. Pirrone, R. Płaneta, G. Politi, A. Pop, F. Porto, M.F. Rivet<sup>1</sup>, E. Rosato, F. Rizzo, P. Russotto, K. Schmidt, K. Siwek-Wilczyńska, I. Skwira, A. Sochocka, A. Trifirñ, M. Trimarchi, G. Verde, M. Vigilante, J.P. Wieleczko, J. Wilczyński, L. Zetta, W. Zipper

**Acta Physica Polonica B 40 (2009) 1199-1207**

The IV Workshop on Particle Correlations and Femtoscopy, Krakow (POL), 11-14 septembre (2008)

<http://hal.in2p3.fr/in2p3-00384563/en/>

09 72 A

### **About the inconsistency between Bohr-Wheeler's transition-state method and Kramer' escape rate in nuclear fission**

K.-H. Schmidt

**Int. J. of Modern Physics E Vol.18 (4) 2009 850-860**

15th Workshop on Nuclear Physics "Marie and Pierre Curie" : 70 years of Fission, Kazimierz Dolny : Pologne (2008)

<http://hal.in2p3.fr/in2p3-00395134/en/>

09 76 T

### **The application of pulse shape analysis to in-beam EXOGAM data**

C. Unsworth, A. Boston, H. Boston, R. Cooper, G. DeFrance, M. Dimmock, A. Grint, D. Oxley, P.J. Nolan

**NIM A 604 (2009) 67-70**

8th International conference on Position Sensitive Detectors (PSD 2008), Glasgow : Royaume-Uni (2008)

<http://hal.in2p3.fr/in2p3-00399822/en/>

09 84 I

### **Recent progress in measuring $\beta$ half-lives of nuclei approaching the r-process waiting point A = 195**

T. Kurtukian-Nieto , J. Benlliure, K.-H. Schmidt, L. Audouin, F. Becker b, B. Blank d, I.N. Borzov, E. Casarejos, M. Fernandez-Ordenez, J. Giovinazzo, D. Henzlova, B. Jurado ,K. Langanke, G. Martinez-Pinedo, J. Pereira, F. Rejmund f , O. Yordanov

**Nuclear Physics A 827 (2009) 587c**

Proceedings of the eighteenth Particles and Nuclei International Conference – PANIC08 Eilat, Israel, 9–14 November, 2008

<http://hal.in2p3.fr/in2p3-00408690>

09 93 A

### **Heavy-Ion Fusion Mechanism And Predictions of Super-Heavy Elements Production**

Y. Abe, C. Shen, D. Boilley, B.G. Giraud, G. Kosenko

**AIP Conference Proceedings 1165 (2009) 128-131**

Nuclear Structure and Dynamics (NSD09), Dubrovnik, Croatia, 4-8 mai 2009

<http://hal.in2p3.fr/in2p3-00384520/fr/>

09 96 T

**Probing High-Velocity Transient-Field Strength Using Heavy-ions Traversing Fe and Gd**

E. Fiori, G. Georgiev, A. E. Stuchbery, A. Jungclaus, D.L. Balabanski et al

**AIP Conference Proceedings 1165 (2009) 120-121**

Nuclear Structure and Dynamics (NSD09), Dubrovnik, Croatia, 4-8 mai 2009

<http://hal.in2p3.fr/in2p3-00414135>

09 100 A

**Energy Functional Based on Natural Orbitals and Occupancies for Static Properties of Nuclei**

D. Lacroix

**AIP Conference Proceedings 1165 (2009) 251-254**

Nuclear Structure and Dynamics (NSD09), Dubrovnik, Croatia, 4-8 mai 2009

<http://hal.in2p3.fr/in2p3-00382132/fr/>

09 101 T

**ACTAR : the New Generation of ACTIVE Targets**

R. Raabe

**AIP Conference Proceedings 1165 (2009) 120-121**

Nuclear Structure and Dynamics (NSD09), Dubrovnik, Croatia, 4-8 mai 2009

<http://hal.in2p3.fr/in2p3-00382137/fr/>

09 102 A

**Pygmy resonances in Sn isotopes within a microscopic multiphonon approach**

E.G. Lanza, MV Andrés, F Catara, Ph. Chomaz and D. Gambacurta

**Journal of Physics: Conference Series 168 (2009) 012014**

12th Conference on 'Theoretical Nuclear Physics in Italy' Cortona : Italie (2008)

<http://hal.in2p3.fr/in2p3-00429412/fr/>

09 113 T

**Proton decay from the isoscalar giant dipole resonance in  $^{58}\text{Ni}$**

M. Hunyadi, H. Hashimoto, T. Li, H. Akimune, H. Fujimura, M. Fujiwara, Z. Gacsi, U. Garg, K. Hara, M.N. Harakeh, J. Hoffman, M. Itoh T. Murakami, K. Nakanishi, B. K. Nayak, S. Okumura, H. Sakaguchi, S. Terashima, M. Uchida, Y. Yasuda, and M. Yosoi

**Physical Review C 80 (2009) 044317**

<http://hal.in2p3.fr/in2p3-00432088>

09 116 A

**Isotopic resolution of fission fragments from  $^{238}\text{U}+^{12}\text{C}$  transfer and fusion reactions**

M. Caamaño, F. Rejmund, X. Derkx, K.-H. Schmidt, L. Andouin, C.-O. Bacri,

G. Barreau, J. Benlliure, E. Casarejos, B. Fernández-Domínguez, L. Gaudefroy,

C. Golabek, B. Jurado, A. Lemasson, A. Navin, a M. Rejmund, a T. Roger,

A. Shrivastava, C. Schmitt, J. Taieb

**AIP Conférence Proceedings 1175 (2009) 15-22**

4th International Workshop on Nuclear Fission-Product Spectroscopy (FISSION 2009), Saint Paul lez Durance : France (2009)

<http://hal.in2p3.fr/in2p3-00396876/fr/>

09 118 A

### **Revisiting the even-odd staggering in fission-fragment yields**

M. Caamaño, F. Rejmund, and K.-H. Schmidt

#### **AIP Conférence Proceedings 1175 (2009) 31-38**

4th International Workshop on Nuclear Fission-Product Spectroscopy (FISSION 2009), Saint Paul lez Durance : France (2009)

<http://hal.in2p3.fr/in2p3-00385083/fr/>

09 119 A

### **Tailoring fission dynamics using fragmentation of radioactive heavy ion beams**

C. Schmitt, A. Kelic, K.-H. Schmidt, A. Heinz, B. Jurado, P.N. Nadtochy

#### **AIP Conférence proceedings 1175 (2009) 43-46**

4th International Workshop on Nuclear Fission-Product Spectroscopy (FISSION 2009), Saint Paul lez Durance : France (2009)

<http://hal.in2p3.fr/in2p3-00385084/fr/>

09 120 A

### **Isospin effects in projectile-like dynamical fission for $^{112,124}\text{Sn}+^{58,64}\text{Ni}$ reactions at 35 AMeV**

P. Russotto, E. De Filippo, A. Pagano, E. Piasecki, F. Amorini, A. Anzalone, L. Auditore, V. Baran, I. Berceanu, J. Blicharsk, B. Borderie, R. Bougault, M. Bruno, J. Brzychczyk, G. Cardella, S. Cavallaro, M. B. Chatterjee, A. Chbihi, M. Colonna, M. D'Agostino, R. Dayras, M. Di Toro, J. Frankland, E. Galichet, W. Gawlikowicz, E. Geraci, F. Giustolisi, A. Grzeszczuk, P. Guazzoni, D. Guinet, S. Kowalski, E. La Guidara, G. Lanzalone, G. Lanzaò,,I N. Le Neindre, C. Maiolino, Z. Majka, M. Papa, M. Petrovici, S. Pirrone, R. Planeta, G. Politi, A. Pop, F. Porto, M. F. Rivet, E. Rosato, F. Rizzo, K. Schmidt, K. Siwek-Wilczynsk, I. Skwira-Chalot, A. Sochocka,I L. Swiderski, A. Trifirò, M. Trimarchi, M. Vigilante, J. P. Wieleczko, J. Wilczynski, L. Zetta, W. Zipper

#### **AIP Conférence Proceedings 1175 (2009) 389-392**

4th International Workshop on Nuclear Fission-Product Spectroscopy (FISSION 2009), Saint Paul lez Durance : France (2009)

<http://hal.in2p3.fr/in2p3-00432283/fr/>

09 121 A

### **Description of charge radii in halo nuclei within the Gamow shell model**

G. Papadimitriou, N. Michel, W. Nazarewicz, M. Ploszajczak, J. Rotureau

#### **AIP Conference Proceedings 1128 (2009) 11-19**

BULK NUCLEAR PROPERTIES: 5th ANL/MSU/JINA/INT FRIB Workshop, East Lansing : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00443758/fr/>

09 130 T

### **The SPIRAL2 Project**

P. Roussel-Chomaz

#### **International Journal of Modern Physics E Vol. 18 (2009) 1951-1956**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00326439/fr/>

09 131 A

### **EURISOL design study : towards an ultimate ISOL facility for Europe**

Y. Blumenfeld, P. Butler, J. Cornell, G. Fortuna, M. Lindroos

#### **International Journal of Modern Physics E Vol. 18 (2009) 1960-1964**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444182/fr/>

09 132 A

### **Active target as a tool for nuclear spectroscopy and réactions**

P. Roussel-Chomaz, H. Savajols

**International Journal of Modern Physics E Vol. 18 (2009) 1997-2002**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444184/fr/>

09 133 A

### **Bubbles in exotic nuclei**

M. Grasso, E. Khan, J. Margueron, N. Van Giai, L. Gaudefroy, T. Niksic, D. Vretenar, J. Piekarewicz, O. Sorlin

**International Journal of Modern Physics E Vol. 18 (2009) 2009-2010**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444184/fr/>

09 134 A

### **Coalescence of two exceptional points in the anti-hermitian 3-level pairing model**

J. Dukelsky, J. Okolowicz, M. Ploszajczak

**International Journal of Modern Physics E Vol. 18 (2009) 2056-2060**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00341834/fr/>

09 135 T

### **Study of the $^{20}\text{O}(\text{d},\text{t})$ reaction with the TIARA-MUST2-VAMOS-EXOGRAM setup**

A. Ramus, N. L. Achouri, H. Al Falou, N. I. Ashwood, D. Beaumel, Y. Blumenfeld, S. M. Brown, W. N. Catford, R. Chapman, M. Chartier, N. Curtis, F. Delaunay, B. Fernandez-Dominguez, C. Force, G. De France, S. Franchoo, J. Guillot, D. Gupta<sup>1</sup>, P. Haigh, F. Hammache, M. Labiche, V. Lapoux, R. C. Lemmon, F. Marechal, B. Martin, X. Mougeot, B. Mougnot, L. Nalpas, A. Navin, N. A. Orr, N. Patterson, B. Pietras, E. C. Pollacco, A. Le Prince, M. Rejmund, J. A. Scarpaci, N. De Sereville, I. Stefan, O. Sorlin, J. S. Thomas, G. L. Wilson

**International Journal of Modern Physics E Vol. 18 (2009) 2056-2060**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444218/fr/>

09 136 A

### **Fermionic molecular dynamics for nuclear dynamics and thermodynamics**

K.H.O. Hasnaoui, Ph Chomaz, F. Gulminelli

**International Journal of Modern Physics E Vol. 18 (2009) 2061-2065**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00344889/fr/>

09 137 T

### **Relevance of equilibrium In multifragmentation**

T. Furuta , A. Ono

**International Journal of Modern Physics E Vol. 18 (2009) 2066-2070**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00338034/fr/>

09 138 T

### **Configuration mixing within the energy density functional formalism: pathologies and cures**

D. Lacroix, M. Bender, T. Duguet

**International Journal of Modern Physics E Vol. 18 (2009) 2108-2113**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00326447/fr/>

09 139 T

**Energy dissipation in fusion reactions from dynamical mean-field theory**

K. Washiyama, D. Lacroix

**International Journal of Modern Physics E Vol. 18 (2009) 2114-2118**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444296/fr/>

09 140 T

**Nuclear weak response from the combined study of  $\beta$ -decay and charge-exchange reaction**

Y. Fujita, B. Rubio, W. Gelletly, B. Blank, T. Adachi, A. Algora, P. Ascher, R.B. Cakirli, G. De France, J. Giovinazzo, S. Grévy, H. Fujita, L. Kucuk, M. Marques, F. Molina, Y. Oktem,

F. De Oliveira Santos, L. Perrot, R. Raabe, P.C. Srivastava, G. Susoy, A. Tamii, J.-C. Thomas

**International Journal of Modern Physics E Vol. 18 (2009) 2134-2139**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444302/fr/>

09 141 A

**Resonant elastic and inelastic scattering. Astrophysical applications. New paradigm beyond drip-lines?**

F. De Oliveira Santos, I. Stefan, J.-C. Dalouzy

**International Journal of Modern Physics E Vol. 18 (2009) 2134-2139**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444305/fr/>

09 142 A

**Fragmentation of radioactive beams for tailoring fission transients**

C. Schmitt, A. Kelic, K.-H. Schmidt, A. Heinz, B. Jurado, P.N. Nadtochy

**International Journal of Modern Physics E Vol. 18 (2009) 2150-2154**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444397/fr/>

09 143 A

**Super separator spectrometer for the LINAG heavy ion beams**

A. Drouart, J.A. Nolen, H. Savajols

**International Journal of Modern Physics E Vol. 18 (2009) 2160-2168**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

<http://hal.in2p3.fr/in2p3-00444415/fr/>

09 144 A

**From di-nucleus to mono-nucleus- Neck evolution in fusion of massive systems –**

Y. Abe, C. Shen, D. Boilley, B. G. Giraud

**International Journal of Modern Physics E Vol. 18 (2009) 2169-2174**

Japanese French Symposium - New paradigms in Nuclear Physics, Paris : France (2008)

09 145 T

<http://hal.in2p3.fr/in2p3-00349923/fr/>

### **Electric quadrupole moment of the neutron-rich $^{33}\text{Al}$**

T. Nagatomo, K. Shimada, K. Asahi, D. L. Balabanski, J. M. Daugas, M. Depuydt, M. De Rydt, L. Gaudefroy, S. Grévy, Y. Hasama, Y. Ichikawa, D. Kameda, P. Morel, L. Perrot, C. Stödel, J. C. Thomas, W. Vanderheijden, N. Vermeulen, P. Vingerhoets, A. Yoshimi, G. Neyens, H. Ueno

**The European Physical Journal A 42 (2009) 383-385**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00429231/fr/>

09 146 A

### **Geant4 Monte Carlo simulations for the LPCTrap setup**

D. Rodriguez, G. Ban, D. Durand, F. Duval, X. Fléchar, E. Liénard, F. Mauger, A. Méry, O. Naviliat-Cuncic, J.-C. Thomas, and Ph. Velten

**Eur. Phys. J. A 42 (2009) 397-400**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00374805/fr/>

09 147 A

### **Neutron correlations in $^6\text{He}$ viewed through nuclear break-up**

M. Assié, J. A. Scarpaci, D. Lacroix, J. C. Angélique, D. Bazin, D. Beaumel, Y. Blumenfeld, W. N. Catford, M. Chabot, A. Chatterjee, M. Fallot, H. Iwasaki, F. Maréchal, D. Mengoni, C. Monrozeau, J. Nyberg, C. Petrache, F. Skaza and T. Tuna

**Eur. Phys. Journal A 42 (2009) 441-446**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00384235/fr/>

09 148 A

### **Radioactive ion beam experiments with active targets**

P. Roussel-Chomaz and On behalf of the MAYA and ACTAR Collaborations,

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

**Eur. Phys. J. A 42 (2009) 447-451**

<http://hal.in2p3.fr/in2p3-00384200/fr/>

09 149 A

### **Properties of very n -rich He isotopes**

A. S. Fomichev, L. V. Grigorenko, M. S. Golovkov, G. M. Ter-Akopian, Yu. Ts. Oganessian, V. A. Gorshkov, S. A. Krupko, A. M. Rodin, S. I. Sidorchuk, R. S. Slepnev, S. V. Stepantsov, R. Wolski, V. Chudoba, A. A. Korshennikov, E. A. Kuzmin, E. Yu. Nikolskii, B. G. Novatskii, D. N. Stepanov, P. Roussel-Chomaz, W. Mittig, D. Pang, A. Ninane, F. Hanappe, L. Stuttge, A. A. Yukhimchuk, V. V. Perevozchikov, Yu. I. Vinogradov, S. K. Grishechkin and S. V. Zlatoustovskiy

**Eur. Phys. Journal A 42 (2009) 397-400**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00400170>

09 150 A

**Production cross-sections of neutron-rich Pb and Bi isotopes in the fragmentation of <sup>238</sup>U**

H. Alvarez-Pol, J. Benlliure, E. Casarejos, L. Audouin, D. Cortina-Gil, T. Enqvist, B. Fernandez, A.R. Junghans, B. Jurado, P. Napolitani, J. Pereira, F. Rejmund, K.-H. Schmidt, O. Yordanov

**The European Physical Journal A 42 (2009) 485-488**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00412579/fr/>

09 151 A

**Production of Cs and Fr isotopes from a high-density UC targets with different grain dimensions**

V.N. Panteleev, O. Alyakrinskiy, M. Barbui, A.E. Barzakh, D.V. Fedorov, V.S. Ivanov, G.

Lhersonneau, K.A. Mezilev, P.L. Molkanov, F.V. Moroz, S.Yu. Orlov, L. Stroe, L.B. Tecchio, M.

Tonezzer, Yu.M. Volkov

**The European Physical Journal A 42 (2009) 485-488**

The Fifth International Conference on Exotic Nuclei and Atomic Masses ENAM'08, 7 – 13 september 2008, Ryn, Poland

<http://hal.in2p3.fr/in2p3-00401530>

09 152 A

## INTERDISCIPLINARY

### PUBLICATIONS

**Mechanical properties of cubic zirconia irradiated with swift heavy ions**

V. Menvie Bekale, G. Sattonnay, C. Legros, A.M. Huntz, S. Poissonnet, L. Thomé

**Journal of Nuclear Materials 384 (2009) 70–76**

<http://hal.in2p3.fr/in2p3-00357527/en/>

09 09 N

**Damages induced by heavy ions in titanium silicon carbide: Effects of nuclear and electronic interactions at room temperature**

J.C. Nappé, Ph. Grosseau, F. Audubert, B. Guilhot, M. Beauvy, M. Benabdesselam, I. Monnet

**Journal of Nuclear Materials 385 (2009) 304-307**

09 27 N

**Ionization and fragmentation of water clusters by fast highly charged ions**

L Adoui, A Cassimi, B Gervais, J-P Grandin, L Guillaume,

R Maisonny, S Legendre,, M Tarisien, P Lopez-Tarifa, M-F Politis,

M-A Hervé du Penhoat, R Vuilleumier, M-PGageot, I Tavernelli,

M. Alcamí, F Martin

**J. Phys. B: At. Mol. Opt. Phys. 42 (2009) 075101 (5pp)**

<http://hal.in2p3.fr/in2p3-00373737/en/>

09 47 N

**2E1 Ar<sup>17+</sup> decay and conventional radioactive sources to determine efficiency of semiconductor detectors**

E. Lamour, C. Prigent, B. Eberhardt, J.P. Rozet, D. Vernhet

**Review of Scientific Instruments 80, (2009) 023103**

09 48 N

**Ionisation and fragmentation of tetraphenyl iron (III) porphyrin chloride induced by slow multiply charged ion impact**

V. Bernigaud, B. Manil, L. Maunoury, J. Rangama, B.A. Huber

**Eur. Phys. J. D 51, 125–130 (2009)**

09 49 N

**Different Mechanisms of Cell Death in Radiosensitive and Radioresistant P53 Mutated Head and Neck Squamous Cell Carcinoma Cell Lines Exposed to Carbon Ions and X-Rays**

M. Maalouf, G. Alphonse, A. Colliaux, M. Beuve, S. Trajkovic-Bodennec, Pr. Battiston-Montagne, I. Testard, O. Chapet, M. Bajard, G. Taucher-Scholz, C. Fournier, C. Rodriguez-Lafrasse

**International J. of Radiation Oncology\*Biolog\*Physics, Vol. 74, Issue 1, (2009), 200-209**

<http://hal.in2p3.fr/in2p3-00382723/en/>

09 50 N

**Scanning probe microscopy investigation of nanostructured surfaces induced by swift heavy ions**

S. Akcöltekin, E. Akcöltekin, M. Schleberger, H. Lebius

**J. Vac. Sci. Technol. B 27 (2009) 944-947**

09 68 N

**Anisotropic ion emission in the fragmentation of small molecules by highly charged ion impact**

Z. Juhász, B. Sulik, F. Frémont, A. Hajaji, J.-Y. Chesnel

**NIM B 267 (2009) 326-329**

09 81 N

**Enhanced susceptibility of CaF<sub>2</sub>(1 1 1) to adsorption due to ion irradiation**

S. Akcöltekin, T. Roll, E. Akcöltekin, M. Klusmann, H. Lebius, M. Schleberger

**NIM B 267 (2009) 683-686**

09 82 N

**Micro-structural evolution of cubic zirconia irradiated with swift heavy ions**

S. Moll, L. Thomé, G. Sattonnay, F. Garrido, L. Vincent, J. Jagielski, T. Thomé

**Vacuum, Volume 83, Supplement 1, (2009), S61-S64**

09 83 N

**EPR analysis of the effects of accelerated carbon ion and fast neutron irradiations on table sugar**

M. Mikou, S. Benzina, P. Bischoff, J.M. Denis, J. Gueulette

**Applied Radiation and Isotopes, Volume 67 (2009) 1738-1741**

09 85 N

**Monte-Carlo based prediction of radiochromic film response for hadrontherapy dosimetry**

T. Frisson, N. Zahra, P. Lautesse, D. Sarrut

**NIM A 606 (2009) 749-754**

09 88 N

**Heavy ion irradiation of condensed CO<sub>2</sub>: sputtering and molecule formation**

E. Seperuelo Duarte, P. Boduch, H. Rothard, T. Been, E. Dartois, L. S. Farenzena, E. F. da Silveira

**Astronomy & Astrophysics 502 (2009) 599-603**

09 95 N

**Ion engineering of embedded nanostructures: From spherical to faceted nanoparticles**

G. Rizza, E. A. Dawi, A. M. Vredenberg, I. Monnet

**Applied Physics Letters 95 (2009) 043105**

09 97 N

**Nanodesign of superhydrophobic surfaces**

S. M.M. Ramos, B. Canut, A. Benyagoub

**Journal of Applied Physics 106 (2009) 024305**

09 98 N

**Neuroimmune response and sleep studies after whole body irradiation with high-LET particles**

C. Marquette, J. Mathieu, J.-M. Bertho, M. Galonnier, J. Wysoki, C. Maubert, E. Balanzat, R. Gerbin, J. Aigueperse, D. Clarençon

**Advances in Space Research 44 (2009) 934–941**

09 99 N

**Mechanism of the swift heavy ion induced epitaxial recrystallization in predamaged silicon carbide**

A. Benyagoub, A. Audren

**Journal of Applied Physics 106 (2009) 083516**

09 116 N

**Field periodic magnetoresistance oscillations in thin graphite single crystals with columnar defects**

Yu. I. Latyshev, A. Yu. Latyshev, A. P. Orlov, A. A. Shchekin, V. A. Bykov, P. Monceau, K. van der Becke, M. Kontsikovskii, and I. Monnet

**JETP Letters 90 (2009) 480-484**

09 127 A

**CONFERENCE PROCEEDINGS**

**Young-type interferences using single-electron sources and an atomic-size two-center interferometer: Dependence with interferometer parameters**

F. Frémont, S. Suarez, R.O. Barrachina, A. Hajaji, N. Sisourat, A. Dubois, J.-Y. Chesnel

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 206–210**

Fourth International Conference on Elementary Processes in Atomic Systems (CEPAS-2008), Cluj-Napoca, Romania, 18-20 June 2008, Edited by Károly Tökési

09 07 N

**Anisotropic ion emission in the fragmentation of small molecules by highly charged ion impact**

Z. Juhász, B. Sulik, F. Frémont, A. Hajaji, J.-Y. Chesnel

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 326-329**

Fourth International Conference on Elementary Processes in Atomic Systems (CEPAS-2008), Cluj-Napoca, Romania, 18-20 June 2008, Edited by Károly Tökési

09 08 N

**AODO: Secondary ion emission and surface modification**

S. Akcöltekin, I. Alzaher, B. Ban d'Etat, T. Been, P. Boduch, A. Cassimi, H. Hijazi, H. Lebius,

B. Manil, J.M. Ramillon, H. Rothard, M. Schleberger, E.F. da Silveira  
Nuclear Instruments and Methods in Physics Research B 267 (2009) 649–651  
17th International Workshop on Inelastic Ion-Surface Collisions (IISC-17), Porquerolles, France, 21–  
26 September 2008  
09 21 N

**Imaging dynamics of charge-auto-organisation in glass capillaries**

A. Cassimi, L. Maunoury, T. Muranaka, B. Huber, K.R. Dey, H. Lebius, D. Lelièvre,  
J.M. Ramillon, T. Been, T. Ikeda, Y. Kanai, T.M. Kojima, Y. Iwai, Y. Yamazaki, H. Khemliche,  
N. Bundaleski, P. Roncin

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 674–677**

17th International Workshop on Inelastic Ion-Surface Collisions (IISC-17), Porquerolles, France, 21–  
26 September 2008  
09 22 N

**Enhanced susceptibility of CaF<sub>2</sub>(111) to adsorption due to ion irradiation**

S. Akcöltekin, T. Roll, E. Akcöltekin, M. Klusmann, H. Lebius, M. Schleberger

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 683–686**

17th International Workshop on Inelastic Ion-Surface Collisions (IISC-17), Porquerolles, France, 21–  
26 September 2008  
09 23 N

**Study of ion emission from a germanium crystal surface under impact of fast Pb ions in channeling conditions**

A. L'Hoir, C. Koumeir, S. Della Negra, P. Boduch, P. Roussel-Chomaz, A. Cassimi, M. Chevallier,  
C. Cohen, D. Dauvergne, M. Fallavier, D. Jacquet, B. Manil, J.-C. Poizat,  
C. Ray, H. Rothard, D. Schmaus, M. Toulemonde

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 876-880**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008

<http://hal-cea.archives-ouvertes.fr/cea-00376042/en/>

09 37 N

**Atom probe tomography of swift ion irradiated multilayers**

J. Juraszek, A. Grenier, J. Teillet, E. Cadel, N. Tiercelin, I. Monnet, M. Toulemonde

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 912-916**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008

09 38 N

**Swelling and optical properties of Si<sub>3</sub>N<sub>4</sub> films irradiated in the electronic regime**

B. Canut, A. Ayari, J. Dupuis, M. Lemiti, A. Fave, S. Ramos

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 917-920**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008

09 39 N

**Dislocation mobility study of heavy ion induced track damage in LiF crystals**

I. Manika, J. Maniks, M. Toulemonde, K. Schwartz

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 949-952**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008

09 40 N

**Defects creation in sapphire by swift heavy ions: A fluence depending process**

A. Kabir, A. Meftah, J.P. Stoquert, M. Toulemonde, I. Monnet

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 957-959**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
09 41 N

**Effects of electronic and nuclear interactions in SiC**

A. Audren, I. Monnet, D. Gosset, Y. Leconte, X. Portier, L. Thomé, F. Garrido, A. Benyagoub, M. Levalois, N. Herlin-Boime, C. Reynaud

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 976-979**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
<http://hal.archives-ouvertes.fr/hal-00404425/en/>

09 42 N

**Amorphisation of ZnAl<sub>2</sub>O<sub>4</sub> spinel under heavy ion irradiation**

A. Quentin, I. Monnet, D. Gosset, B. Lefrançois, S. Bouffard

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 980-982**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
09 43 N

**Dose profile monitoring with carbon ions by means of prompt-gamma measurements**

E. Testa, M. Bajard, M. Chevallier, D. Dauvergne, F. Le Foulher, N. Freud, J.M. Létang, J.C. Poizat, C. Ray, M. Testa

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 993-996**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
09 44 N

**Optimization of nanopores obtained by chemical etching on swift-ion irradiated lithium niobate**

M.L. Crespillo, M. Otto, A. Munoz-Martin, J. Olivares, F. Agulló-López, M. Seibt, M. Toulemonde, C. Trautmann

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 1035-1038**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
09 45 N

**Investigation of initial stage of chemical etching of ion tracks in polycarbonate**

N. Sertova, E. Balanzat, M. Toulemonde, C. Trautmann

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 1039-1044**

Seventh International Symposium on Swift Heavy Ions in Matter, Lyon, France, 02-05 Juin 2008  
09 46 N

**Study of the damage produced in silicon carbide by high energy heavy ions**

A. Benyagoub, A. Audren

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 1255-1258**

16th International Conference on Ion Beam Modification of Materials, Dresden, Germany, 31 August–5 September 2008  
09 60 N

**Patterning of insulating surfaces by electronic excitation**

S. Akcöltekin, E. Akcöltekin, T. Roll, H. Lebius, M. Schleberger

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 1386-1389**

16th International Conference on Ion Beam Modification of Materials, Dresden, Germany, 31 August–5 September 2008  
09 61 N

### **Radiation tolerance of fluorite-structured oxides subjected to swift heavy ion irradiation**

F. Garrido, S. Moll, G. Sattonnay, L. Thomé, L. Vincent

**Nuclear Instruments and Methods in Physics Research B 267 (2009) 1451-1455**

16th International Conference on Ion Beam Modification of Materials, Dresden, Germany, 31 August–5 September 2008

<http://hal.in2p3.fr/in2p3-00379415/en/>

09 62 N

### **Radiation effects in cubic zirconia: A model system for ceramic oxides**

L. Thomé, S. Moll, G. Sattonnay, L. Vincent, F. Garrido, J. Jagielski

**Journal of Nuclear Materials 389 (2009) 297–302**

Particle Beam Induced Radiation Effects in Materials, New Orleans : États-Unis d'Amérique (2008)

<http://hal.in2p3.fr/in2p3-00379450/en/>

09 63 N

### **X-ray spectroscopy characterization of Ar<sup>17+</sup> produced by an ECRIS in the afterglow mode**

C. Prigent, E. Lamour, L. Maunoury, F. Noury, J.-Y. Pacquet, J. M. Ramillon, J. -P. Rozet, D. Vernhet, M. Trassinelli

**Journal of Physics : Conferences Series 163 (2009) 012111**

14th International Conférence on the Physics of Highly Charged Ions (HCI 2008), 1-5 septembre 2008, Tokyo (JPN)

<http://hal.archives-ouvertes.fr/hal-00425366/fr/>

09 114 N

## **ACCELERATOR PHYSICS**

### **PUBLICATIONS**

#### **Studies of the ECR plasma using the TrapCAD code**

L Maunoury, C Pierret, S Biri, J Y Pacquet

**Plasma Sources Sci. Technol. 18 (2009) 015019 (7pp)**

<http://hal-cea.archives-ouvertes.fr/cea-00359144/en/>

09 15 C

### **CONFERENCE PROCEEDINGS**

#### **Solid state RF amplifiers for accelerator applications**

M. Di Giacomo

**Proceedings of the Particle Accelerator Conférence (PAC09), Vancouver (Canada) 4-8 mai 2009, 1-5**

<http://hal.in2p3.fr/in2p3-00382152/en/>

09 69 C

#### **SPIRAL 2 injector diagnostics**

P. Ausset, T.A. Andre, C. Doutressoulles, B. Ducoudret, C. Jamet, W. Le Coz, F. Lpoittevin, E. Swartvagher, J.L. Vignet, C. Maazouzi, C. Olivetto, C. Ruescas

**Proceedings of DIPAC09 (2009) 1-3**

9th European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators (DIPAC 2009), Basel : Suisse (2009)

<http://hal.in2p3.fr/in2p3-00397621/en/>

09 77 C

### **Beam Diagnostics for SPIRAL2 RNB**

P. Anger, T. A. Andre, A. Delannoy, J.M. Fontbonne, E. Gueroult, B. Jacquot, C. Jamet, G. Ledu, N. Orr, A. Savalle, F. Varenne, J. L. Vignet

#### **Proceedings of DIPAC09 (2009)**

9th European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators (DIPAC 2009), Basel : Suisse (2009)

<http://hal.in2p3.fr/in2p3-00397625/en/>

09 78 C

### **Phase and amplitude measurement for the SPIRAL2 accelerator**

C. Jamet, W. Le Coz, C. Doutressoulles, T. Andre, E. Swartvagher

#### **Proceedings of DIPAC09 (2009) 1-3**

9th European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators (DIPAC 2009), Basel : Suisse (2009)

<http://hal.in2p3.fr/in2p3-00397625/en/>

09 79 C

## **THESES –THESIS**

### **A la recherche d'une signature de la formation et décroissance du système géant "Z=184"**

Cedric Golabek

#### **GANIL T 09 01**

Soutenue le 8 juillet 2009

<http://tel.archives-ouvertes.fr/tel-00416431/fr/>

### **Study of reactions induced by the halo nucleus $^{11}\text{Li}$ with the active target MAYA**

Thomas Roger

#### **GANIL T 09 02**

Soutenue le 25 Septembre 2009

<http://tel.archives-ouvertes.fr/tel-00424010/fr/>

#### **GANIL T 09 03**

### **Etude de la structure du $^{44}\text{S}$ par sa décroissance isomérique**

C. Force

16 October 2009

<http://tel.archives-ouvertes.fr/tel-00430125/fr/>

#### **GANIL T 09 04**

### **Premiers états du $^{15}\text{F}$ étudiés par diffusion élastique résonante**

F. de Grancey

Soutenue le 19 octobre 2009

## RAPPORTS - REPORTS

**GANIL2015**

**Evaluation de l'extension de la ligne LISE2000**

L. Perrot, S. Grévy, F. Chautard, R. Hue, O. Kamalou

<http://hal.in2p3.fr/in2p3-00370151/en/>