

Grand Accélérateur National d'Ions Lourds



# GROUPE PHYSIQUE DOCUMENTATION



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Production Scientifique du GANIL : 90

Publications relatives au GANIL dans des revues à comité de lecture : 38

Actes de Conférences : 38

Prétirages GANIL : 12

Rapports GANIL : 1

Thèses GANIL :

Prétirages relatifs au GANIL : 2

Thèses relatives au GANIL :

## **PUBLICATIONS DANS DES REVUES À COMITÉ DE LECTURE**

### **PHYSIQUE NUCLEAIRE**

#### **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>

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. Lautesse, J. Lukasik, D. Mercier,  
M. Pârlig, E. Rosato, R. Roy, C. Sfienti, M. Vigilante, J.P. Wieleczko, B. Zwieglinski,  
INDRA - ALADIN Collaborations

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

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

09 03 A

#### **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/fr/>

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. Stepanov,  
R. Wolski, D.Y. Pang, V. Chudoba, A.A. Korsheninnikov, 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/fr/>

09 06 A

#### **Spectroscopy of $^{52,53}\text{Sc}$**

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/fr/>

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>

09 13 A

## **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. Jacquiot, V. L. Kravchuk

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

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

09 19 A

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

L. Gaudefroy, 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/fr/>

09 20 A

## **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)**

09 35 A

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

## **Isotopic Dependence of the Nuclear Caloric Curve**

C. Sfienti, 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. Ducret3, H. Emling, J.D. Frankland, M. Hellstrom, D. Henzlova, G. Imme, I. Iori, H. Johansson, K. Kezzar, A. Lafriakh, A. Le Fevre, E. Le Gentil3, Y. Leifels, J. Luhning, 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. Pawlowski, 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)**

09 56 A

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

## **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)**

09 58 A

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

## **Neutron yield from carbon, light-and heavy-water thick targets irradiated by 40MeV deuterons**

G. Lhersonneau, T. Malkiewicz, K. Kolos, M. Fadil, H. Kettunen, M.G. Saint-Laurent1, A. Pichard1, W.H. Trzaska, G. Tyurin, L. Cousin

**NIM A 603 (2006) 228-235**

09 70 A

<http://hal.in2p3.fr/in2p3-00382700>

## **Fission times of excited nuclei: An experimental overview**

D. Jacquet, M. Morjean

**Progress in Particle and Nuclear Physics 63 (2009) 155-185**

09 74 T

<http://hal.in2p3.fr/in2p3-00392589/fr/>

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

D. Rodriguez, G. Ban, D. Durand, F. Duval, X. Fléchard, E. Liénard, F. Mauger, A. Méry3, O. Naviliat-Cuncic, J.-C. Thomas, and Ph. Velten

**Eur. Phys. J. A (2009) (On Line First)**

## **PHYSIQUE THEORIQUE**

### **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/fr/>

09 01 T

**Relevance of equilibrium in multifragmentation**

T. Furuta, A. Ono

**Physical Review C 79 (2009) 014608**<http://hal.in2p3.fr/in2p3-00354796/fr/>

09 04 T

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

D. Lacroix

**Physical Review C 79, 014301 (2009)**<http://hal.in2p3.fr/in2p3-00348461/fr/>

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/fr/>

09 11 T

**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/fr/>

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/fr/>

09 17 T

**Criticality in the configuration-mixed interacting boson model: (2)  $Q^*(x_1)Q^*(x_1)-Q^*(x_2)Q^*(x_2)$  mixin**

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

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

09 18 T

<http://hal.in2p3.fr/in2p3-00343245/fr/>**Partial Dynamical Symmetry in Quantum Hamiltonians with Higher-Order Terms**

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

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

09 26 T

<http://hal.in2p3.fr/in2p3-00349047/fr/>**Nuclear “bubble” structure in  $^{34}\text{Si}$** 

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

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

09 36 T

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

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

S. Lalkovski and P. Van Isacker

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

09 64 T

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

## **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)**

09 65 T

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

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

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

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

09 66 T

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

## **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)**

09 67 T

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

## **The interacting boson model for exotic nuclei**

P. Van Isacker

**Rivista del Nuovo Cimento 32 (2009) 71-104**

09 71 T

<http://hal.in2p3.fr/in2p3-00382692/fr/>

## **Probing neutron correlations through nuclear breakup**

M. Assié, D. Lacroix

**Physical Review Letters (2009) 202501**

09 73 T

<http://hal.in2p3.fr/in2p3-00351191/fr/>

## **Fluctuation and dissipation dynamics in fusion reactions from stochastic mean-field approach**

S. Ayik, K. Washiyama, D. Lacroix

**Physical Review C 79 (2009) 054606**

09 75 T

<http://hal.in2p3.fr/in2p3-00358844/fr/>

## **PHYSIQUE DES IONS RAPIDES/INTERDISCIPLINAIRE**

### **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>

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 Guillaume1,,  
R Maisonne, S Legendre,, M Tarisien, P Lopez-Tarifa, M-F Politis,  
M-A Hervé du Penhoat, R Vuilleumier, M-P Gaigeot, I Tavernelli,  
M. Alcami, F Martín

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

09 47 N

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

**2E1 Ar17+ 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. Coliaux, 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\*Biology\*Physics, Vol. 74, Issue 1, (2009), 200-209**

09 50 N

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

**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

## **PHYSIQUE DES ACCELERATEUR**

**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/fr/>

09 15 C

## **COMPTE-RENDUS DE CONFERENCES**

### **ACTES DE CONFERENCES DANS DES REVUES A COMITES DE LECTURE**

#### **PHYSIQUE NUCLÉAIRE THÉORIQUE**

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

J. Okolowicz, M. Płoszajczak

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

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

09 28 T

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

**About the inconsistency between Bohr-Wheeler's transition-state method and Kramer's 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)

09 76 T

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

#### **PHYSIQUE NUCLÉAIRE**

##### **Recent results from GANIL**

S. Fransoo, 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. Gaudreault, M. Gélin, J. Gibelin, A. Görgen, 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. Pougeon, 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

09 29 A

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

## **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. Zieliński

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

Zakopane Conférence on Nuclear Physics, 1-7 Septembre, 2009, Zakopane, Pologne  
09 30 A

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

## **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. Lautesse, 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  
09 31 A

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

## **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. Bańska, 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 Tourreil, 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  
09 32 A

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

## **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  
09 33 A

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

## **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  
09 34 A

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

## **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. Zwiegliski

## **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)

09 59 A

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

## **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. Borderie1, 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. Lanzań, 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. Rivet1, E. Rosato, F. Rizzo, P. Russotto, K. Schmidt, K. Siwek-Wilczyńska, I. Skwira, A. Sochocka, A. Trifirń, 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)

09 72 A

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

## **PHYSIQUE DES IONS RAPIDES/INTERDISCIPLINAIRE**

### **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

09 37 N

<http://hal.archives-ouvertes.fr/hal-00257795/fr/>

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

**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  
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  
09 62 N  
<http://hal.in2p3.fr/in2p3-00379415/fr/>

**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)  
09 63 N  
<http://hal.in2p3.fr/in2p3-00379450/fr/>

## **ACTES DE CONFERENCES DANS DES OUVRAGES**

### **PHYSIQUE NUCLEAIRE THÉORIQUE**

**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.  
09 24 T  
<http://hal.in2p3.fr/in2p3-00368786/fr/>

**Extraction of nucleus-nucleus potential and energy dissipation from dynamical mean-field theory**  
K. Washiyama, D. Lacroix  
**AIP Conférence Proceedings 1098 (2009) 70-75**  
FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)  
09 53 T  
<http://hal.in2p3.fr/in2p3-00341683/fr/>

**Exact Stochastic Mean-Field dynamics**  
Lacroix D., Hupin G.  
**AIP Conférence Proceedings 1098 (2009) 128-132**  
FUSION08: New Aspects of Heavy Ion Collisions Near the Coulomb Barrier, Chicago : États-Unis d'Amérique (2008)  
09 54 T  
<http://hal.in2p3.fr/in2p3-00348464>

## **PHYSIQUE NUCLEAIRE**

### **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.

09 25 A

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

### **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. Lautesse, N. Le Neindre, A. D'onofrio, M. Parlog, D. Pierroutsakou, F. Rejmund, M.F. Rivet, M. Romoli, R. Roy

### **AIP Conférence Proceedings 1098 (2009) 64-69**

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

09 52 A

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

### **Transfer and brakup pf light weakly-bound nuclei**

Raabe R.

### **AIP Conférence Proceedings 1098 (2009) 257-263**

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

09 55 A

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

## **PHYSIQUE DES ACCELERATEURS**

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

M. Di Giacomo

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

09 69 C

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

### **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)

09 77 C

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

## **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)

09 78 C

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

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

C. Jamet, W. Le Coz, C. Doutressoules, 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)

09 79 C

<http://hal.in2p3.fr/in2p3-00397563/fr/>

## **PRETIRAGES**

### **PRETIRAGES GANIL**

**GANIL P 09 01/arXiv : 0901.0470**

**From Di-Nucleus to Mono-Nucleus - Neck Evolution in Fusion of Massive Systems –**

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

*Proceedings of the Japanese French Symposium - New paradigms in Nuclear Physics, Paris, 29th September - 2nd October, to be published in Int. J. of Modern Physics E*

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

**GANIL P 09 02**

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

J.P. Wileczko, 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. Lautesse, N. Le Neindre, A. D'onofrio, M. Parlog, D. Pierroutsakou, F. Rejmund, M.F. Rivet, M. Romoli, R. Roy

*FUSION08: International Conference on Heavy Ion Collisions near the Coulomb Barrier, Chicago : États-Unis d'Amérique, 22-26 septembre 2008*

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

**GANIL P 09 03**

**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

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

**GANIL P 09 04/arXiv : 0901.0848**

**Probing neutron correlations through nuclear break-up**

M. Assie, D. Lacroix

<http://hal.in2p3.fr/in2p3-00351191/fr/>

**GANIL P 09 05/arXiv : 0902.0592**

**Fluctuation and dissipation dynamics in fusion reactions from stochastic mean-field approach**

S. Ayik, K. Washiyama, D. Lacroix

<http://hal.in2p3.fr/in2p3-00358844/fr/>

**GANIL P 09 06/arXiv : 0902.3889**

**Structure of many-body continuum states in the proximity of exceptional points**

J. Okolowicz, and M. Ploszajczak

<http://hal.in2p3.fr/in2p3-00365054>

**GANIL P 09 07/ arXiv : 0903.3826**

**IBM-1 calculations towards the neutron-rich nucleus 106Zr**

S. Lalkovski, P. Van Isacker

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

## **GANIL P 09 08**

### **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

## **GANIL P 09 09, arXiv : 0904.3047**

### **Collision dynamics of two $^{238}\text{U}$ atomic nuclei**

C Golabek, C Simenel

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

## **GANIL P 09 10**

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

M. Caamano, F. Rejmund, K.-H. Schmidt

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

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

## **GANIL P 09 11**

### **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, M. Rejmund, T. Roger, A. Shrivastava, C. Schmitt, J. Taieb

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

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

## **GANIL P 09 12, arXiv : 0906.4272**

### **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, C. Stodel, J.C. Thomas, H. Ueno, Y. Utsuno, W. Vanderheijden, N. Vermeulen, P. Vingerhoets, A. Yoshimi

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

## **PRETIRAGES RELATIFS À GANIL**

### **arXiv : 0903.1772**

#### **Isotopic Dependence of the Nuclear Caloric Curve**

C. Sfienti, P. Adrich, T. Aumann, C. O. Bacri, T. Barczyk et al

The ALADIN2000 Collaboration

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

### **arXiv : 0904.2653**

#### **Microscopic description of heavy ion collisions around the barrier**

C. Simenel, B. Avez, C. Golabek

<http://hal.archives-ouvertes.fr/hal-00376251/fr/>

## **RAPPORTS**

**GANIL2015**

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

L. Perrot (IPN Orsay), S. Grévy, F. Chautard, R. Hue, O. Kamalou (GANIL Caen)

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