

List of publications of ESNT from 2004 to 2021

Publications based on works performed by physicists in the framework of the ESNT projects during their stays as visitors at CEA (in bold the one(s) directly involved as a long-stay visitor or post-doc at ESNT when the paper is prepared). These publications include directly a reference to the ESNT framework and an acknowledgement for the support.

Liste des publications

(comportant une référence à l'ESNT, **ex** : acknowledgements ou affiliation CEA, ESNT du post-doc (fiche actualisée sur le site Web <http://esnt.cea.fr/index.php?id=10&ref=1>))

2021

◆ *Localisation and alpha radioactivity,*

J-P. Ebran, E. Khan, **R-D. Lasserri**,

submitted to JPG, oct. 2020. <https://arxiv.org/abs/2001.07436>

◆ *Emergent four-body parameter in universal two-species bosonic systems*

L. Contessi, J. Kirscher, M.P. Valderrama,

Phys. Lett. A **408**, 127479 (2021). arXiv:2103.14711 doi : 10.1016/j.physleta.2021.127479

◆ *Multi-fermion systems with contact theories.*

M. Schäfer, **L. Contessi**, J. Kirscher, J. Mares,

Phys. Lett. B **816**, 136194 (2021). arXiv:2003.09862 doi: 10.1016/j.physletb.2021.136194

◆ *Triple-X and beyond: hadronic molecules of three and more X(3872).*

L. Contessi, J. Kirscher, M. P. Valderrama

Phys. Rev. D **103**, 056001 (2021). arXiv:2008.12268 doi: 10.1103/PhysRevD.103.056001

- ◆ *Alpha-particle condensation: A nuclear quantum phase transition*,
J.-P. Ebran, M. Girod, E. Khan, **R.-D. Lasserri**, and P. Schuck
Phys. Rev. C **102**, 014305 (2020).doi:10.1103/PhysRevC.102.014305
- ◆ *Microscopic description of the self-conjugate ^{108}Xe and ^{104}Te alpha-decay chain*,
F. Mercier, J. Zhao, **R.-D. Lasserri**, J.-P. Ebran, E. Khan, T. Nikšić, and D. Vretenar,
Phys. Rev. C **102**, 011301(R) (2020).doi:10.1103/PhysRevC.102.011301
- ◆ *Novel chiral Hamiltonian and observables in light and medium-mass nuclei*,
V. Somà, P. Navrátil, **F. Raimondi**, C. Barbieri, and T. Duguet,
Phys.Rev. C **101**, 014318 (2020). doi: 10.1103/PhysRevC.101.014318
- ◆ *Taming Nuclear Complexity with a Committee of Multilayer Neural Networks*
R.-D. Lasserri, D. Regnier, J.-P. Ebran, and A. Penon
Phys. Rev. Lett. **124**, 162502 (2020). doi:10.1103/PhysRevLett.124.162502
- ◆ *Restoration of the Natural $E(1/2+1) - E(3/2+1)$ Energy Splitting in Odd- K Isotopes Towards $N = 40$* ,
Y.L. Sun, A.Obertelli, P.Doornenbal, C.Barbieri, Y.Chazono, T.Duguet, H.N.Liu, P.Navratil, F.Nowacki,
K.Ogata, T.Otsuka, **F.Raimondi**, V.Soma, Y.Utsuno, K.Yoshida, N.Achouri, H.Baba, F.Browne, D.Calvet,
F.Chateau, S.Chen, N.Chiga, A.Corsi, M.L.Cortes, A.Delbart, J.-M.Gheller, A.Giganon, A.Gillibert, C.Hilaire,
T.Isobe, T.Kobayashi, Y.Kubota, V.Lapoux, T.Motobayashi, I.Murray, H.Otsu, V.Panin, N.Paul,
W.Rodriguez, H.Sakurai, M.Sasano, D.Steppenbeck, L.Stuhl, Y.Togano, T.Uesaka, K.Wimmer, K.Yoneda,
O.Aktas, T.Aumann, L.X.Chung, F.Flavigny, S.Franchoo, I.Gasparic, R.-B.Gerst, J.Gibelin, K.I.Hahn, D.Kim,
T.Koiwai, Y.Kondo, P.Koseoglou, J.Lee, C.Lehr, B.D.Linh, T.Lokotko, M.MacCormick, K.Moschner,
T.Nakamura, S.Y.Park, D.Rossi, E.Sahin, D.Sohler, P.-A.Soderstrom, S.Takeuchi, H.Tornqvist, V.Vaquero,
V.Wagner, S.Wang, V.Werner, X.Xu, H.Yamada, D.Yan, Z.Yang, M.Yasuda, L.Zanetti
Phys.Lett.B **802**,135215 (2020). 10.1016/j.physletb.2020.135215
- ◆ *In-beam gamma-ray and electron spectroscopy of $^{249,251}\text{Md}$*
R. Briselet, Ch. Theisen, B. Sulignano, M. Airiau, K. Auranen, D. M. Cox, F. Déchery, A. Drouart, Z. Favier,
B. Gall, T. Goigoux, T. Grahn, P. T. Greenlees, K. Hauschild, A. Herzan, R.-D. Herzberg, U. Jakobsson, R.
Julin, S. Juutinen, J. Konki, M. Leino, A. Lopez-Martens, A. Mistry, P. Nieminen, J. Pakarinen, P.
Papadakis, P. Peura, P. Rahkila, J. Rubert, P. Ruotsalainen, M. Sandzelius, J. Sarén, C. Scholey, J. Sorri, S.
Stolze, J. Uusitalo, M. Vandebrouck, A. Ward, M. Zielinska, **B. Bally**, M. Bender, W. Ryssens,
Phys. Rev. C **102**, 014307 (2020). doi: 10.1103/PhysRevC.102.014307

- ◆ *Quasifree Neutron Knockout from ^{54}Ca Corroborates Arising $N=34$ Neutron Magic Number*, S. Chen, J. Lee, P. Doornenbal, A. Obertelli, C. Barbieri, Y. Chazono, P. Navrátil, K. Ogata, T. Otsuka, **F. Raimondi**, V. Somà, Y. Utsuno, K. Yoshida, H. Baba, F. Browne, D. Calvet, F. Château, N. Chiga, A. Corsi, M.L. Cortés, A. Delbart, J.-M. Gheller, A. Giganon, A. Gillibert, C. Hilaire, T. Isobe, J. Kahlbow, T. Kobayashi, Y. Kubota, V. Lapoux, H. N. Liu, T. Motobayashi, I. Murray, H. Otsu, V. Panin, N. Paul, W. Rodriguez, H. Sakurai, M. Sasano, D. Steppenbeck, L. Stuhl, Y.L. Sun, Y. Togano, T. Uesaka, K. Wimmer, K. Yoneda, et al., Phys. Rev. Lett. 123, 142501 (2019). doi:10.1103/PhysRevLett.123.142501
- ◆ *Core-polarization effects and effective charges in O and Ni isotopes from chiral interactions*, **F. Raimondi**, C.Barbieri, Phys. Rev. C 100, 024317 (2019). doi: 10.1103/PhysRevC.100.024317
- ◆ *Nuclear electromagnetic dipole response with the self-consistent Green's function formalism* **F.Raimondi**, C.Barbieri, Phys. Rev. C 99, 054327 (2019). doi: 10.1103/PhysRevC.99.054327
- ◆ *Pre-processing the nuclear many-body problem: Importance truncation versus tensor factorization techniques*, **A. Tichai**, J. Ripoche, T. Duguet, Eur. Phys. J. A 55 : 90 (2019). doi:10.1140/epja/i2019-12758-6
- ◆ *Natural orbitals for ab initio no-core shell model calculations*, **A. Tichai**, J. Müller, K. Vobig, R. Roth, Phys. Rev. C 99, 034321 (2019). doi:10.1103/PhysRevC.99.034321
- ◆ *Tensor-decomposition techniques for ab initio nuclear structure calculations: from chiral nuclear potentials to ground-state energies*, **A. Tichai**, R. Schutski, G. E. Scuseria, T. Duguet, Phys. Rev. C 99, 034320 (2019). doi:10.1103/PhysRevC.99.034320
- ◆ *ADG: Automated generation and evaluation of many-body diagrams, I. Bogoliubov many-body perturbation theory*, P. Arthuis, T. Duguet, **A. Tichai**, R.-D. Lasserri, J.-P. Ebran, Comp. Phys. Comm. 240: 202-227 (2019) arXiv :1809.01187
- ◆ *Normal-ordered k-body approximation in particle-number-breaking theories*, J. Ripoche, **A. Tichai**, T. Duguet, arXiv :1908.00765 (submitted to Eur. Phys. J. A, 2019)
- ◆ *Many-body perturbation theories for finite nuclei*, **Alexander Tichai**, Robert Roth, Thomas Duguet, contribution to 'Frontiers in Physics' arXiv:2001.10433 [nucl-th]

2018

- ◆ *Mean-field approach to reconstructed neutrino energy distributions in accelerator-based experiments*, A. Nikolakopoulos, M. Martini, M. Ericson, N. Van Dessel, R. González-Jiménez, and N. Jachowicz Phys. Rev. C **98**, 054603 (2018). doi:10.1103/PhysRevC.98.054603
Work done partially during a visit of A. Nikolakopoulos at ESNT.

- ◆ *Bogoliubov many-body perturbation theory for open-shell nuclei*, A. **Tichai**, P. Arthuis, T. Duguet, V. Somà, H. Hergert, R. Roth, Phys. Lett. B **786**, 195-200 (2018). arXiv :1806.10931, doi:10.1016/j.physletb.2018.09.044

- ◆ *Open-Shell Nuclei from No-Core Shell Model with Perturbative Improvement*, A. **Tichai**, E. Gebrerufael, K. Vobig, R. Roth, Phys. Lett. B **786**, 448-452 (2018). arXiv :1703.05664, doi:10.1016/j.physletb.2018.10.029

- ◆ *Norm overlap between many-body states: Uncorrelated overlap between arbitrary Bogoliubov product states*, B. **Bally**, T. Duguet, Phys. Rev. C **97**, 024304 (2018). arXiv: 1704.05324, doi : 10.1103/PhysRevC.97.024304

- ◆ *Neutrino-nucleus cross sections and oscillation experiments*, T. Katori, M. **Martini**, J.Phys. G **45**, 013001 (2018). arXiv:1611.07770v1

- ◆ *NuSTEC White Paper: Status and Challenges of Neutrino-Nucleus Scattering*, L. Alvarez-Ruso, M. Sajjad Athar, M.B. Barbaro, D. Cherdack, M.E. Christy, P. Coloma, T.W. Donnelly, S. Dytman, A. de Gouvea, R.J. Hill, P. Huber, N. Jachowicz, T. Katori, A.S. Kronfeld, K. Mahn, M. **Martini**, J.G. Morfin, J. Nieves, G. Perdue, R. Petti, D.G. Richards , F. Sanchez, T. Sato, J.T. Sobczyk, G.P. Zeller, *Progress in Particle and Nuclear Physics* **100**, 1 (2018). arXiv:1706.03621 ; doi:10.1016/j.pnnp.2018.01.006

- ◆ *De-excitation of the strongly coupled band in ^{177}Au and implications for core intruder configurations in the light Hg isotopes*, M. Venhart, F. A. Ali, W. Ryssens, J. L. Wood, D. T. Joss, A. N. Andreyev, K. Auranen, **B. Bally**, M. Balogh, M. Bender, et al., Phys. Rev. C **95**, 061302(R) (2017). doi: 10.1103/PhysRevC.95.061302
- ◆ *Unexpected high-energy γ emission from decaying exotic nuclei*, A. Gottardo, D. Verney, I. Deloncle, S. Peru, C. Delafosse, S. Roccia, I. Matea, C. Sotty, C. Andreoiu, C. Costache, M.-C. Delattre, A. Etile, S. Franchoo, C. Gaulard, J. Guillot, F. Ibrahim, M. Lebois, M. MacCormick, N. Marginean, R. Marginean, **M. Martini**, C. Mihai, I. Mitu, L. Olivier, C. Portail, L. Qi, B. Roussiere, L. Stan, D. Testov, J. Wilson, D. T. Yordanov, Phys. Lett. B **772**, 359 (2017). doi: 10.1016/j.physletb.2017.06.050
- ◆ *Electromagnetic dipole and Gamow-Teller responses of even and odd $^{90-94}_{40}\text{Zr}$ isotopes in QRPA calculations with the D1M Gogny force*, I. Deloncle, S. Péru, **M. Martini**, Eur. Phys. J. A, **53** 8 (2017) 170. doi: 10.1140/epja/i2017-12354-x
- ◆ *E1 and M1 strength functions from Average Resonance Capture data*, J. Kopecky, S. Goriely, S. Péru, S. Hilaire, **M. Martini**, Phys. Rev. C **95**, 054317 (2017). doi: 10.1103/PhysRevC.95.054317
- ◆ *Are there Signatures of Harmonic Oscillator Shell Gaps Far From Stability? –First Spectroscopy of ^{110}Zr* , N. Paul, A. Corsi, A. Obertelli, P. Doornenbal, G. Authelet, H. Baba, **B. Bally**, M. Bender, D. Calvet, F. Château, S. Chen, J.-P. Delaroche, A. Delbart, J.-M. Gheller, A. Giganon, A. Gillibert, M. Girod, P. H. Heenen, V. Lapoux, J. Libert, T. Motobayashi, M. Niikura, T. Otsuka, T. R. Rodríguez, J. Y. Roussé, H. Sakurai, C. Santamaria, N. Shimizu, D. Steppenbeck, R. Taniuchi, T. Togashi, Y. Tsunoda, T. Uesaka, et al., Phys. Rev. Lett. **118**, 032501 (2017). doi: 10.1103/PhysRevLett.118.032501
Article of experimentalists from the SPhN LENA group in collaboration with theorists.
- ◆ *Beyond-mean-field correlations and the description of superheavy elements*, Paul-Henri Heenen, Benjamin Bally, Michael Bender and Wouter Ryssens, Nobel Symposium NS 160 – Chemistry and Physics of Heavy and Superheavy Elements, EPJ Web of Conferences **131**, 02001 (2016). <https://doi.org/10.1051/epjconf/201613102001>
- ◆ *Modeling the double charge exchange response function for a tetraneutron system*, R. Lazauskas, J. Carbonell, and E. Hiyama, Prog. Theor. Exp. Phys. 073D03 (2017). <https://doi.org/10.1093/ptep/ptx078>
Works partly done during the ESNT workshops organized in 2016 and 2017 “Computation of three- and four-neutron resonances” and “Dynamics of highly unstable exotic light nuclei and few-body systems”. (acknowledgements for the ESNT support).

- ◆ *Radii and binding energies in oxygen isotopes: a challenge for the nuclear forces.*
V. Lapoux, V. Somà, C. Barbieri, H. Hergert, J. D. Holt, R. Stroberg,
Phys. Rev. Lett. **117**, 052501 (2016). doi: <https://doi.org/10.1103/PhysRevLett.117.052501>
Works initiated during the ESNT workshop in April 2014, "Radioactive ion beam experiments and three-nucleon forces".
- ◆ *On the possibility of generating a 4-neutron resonance with a $T=3/2$ isospin 3-neutron force,*
J. Carbonell, E. Hiyama, R. Lazauskas, M. Kamimura, Phys. Rev. C **93**, 044004 (2016). *Works done partly during the ESNT workshop in October 2015, "Computation of three- and four-neutron resonances".*
- ◆ *Low-energy modification of the γ strength function of the odd-even nucleus ^{115}In ,*
M. Versteegen, D. Denis-Petit, V. Méot, Th. Bonnet, M. Comet, F. Gobet, F. Hannachi, M. Tarisien, P. Morel, **M. Martini**, and S. Péru, Phys. Rev. C **94**, 044325 (2016).
- ◆ *Gogny-Hartree-Fock-Bogolyubov plus quasiparticle random-phase approximation predictions of the $M1$ strength function and its impact on radiative neutron capture cross section,*
S. Goriely, S. Hilaire, S. Péru, **M. Martini**, I. Deloncle and F. Lechaftois, Phys. Rev. C **94**, 044306 (2016).
- ◆ *Nuclear response functions with finite range Gogny force: tensor terms and instabilities,*
A. De Pace and **M. Martini**, Phys. Rev. C **94**, 024342 (2016).
- ◆ *Large-scale deformed quasiparticle random-phase approximation calculations of the γ -ray strength function using the Gogny force,* **M. Martini**, S. Péru, S. Hilaire, S. Goriely and F. Lechaftois,
Phys. Rev. C **94**, 014304 (2016).
- ◆ *Emission of neutron-proton and proton-proton pairs in electron scattering induced by meson-exchange currents,* I. Ruiz Simo, J.E. Amaro, M.B. Barbaro, A. De Pace, J.A. Caballero, G.D. Megias, T.W. Donnelly,
Phys. Rev. C **94**, 054610 (2016); doi: [10.1103/PhysRevC.94.054610](https://doi.org/10.1103/PhysRevC.94.054610)
Work discussions of the authors during the ESNT workshop held in 18-22 April 2016: "Two-body current contributions in neutrino-nucleus scattering". (Acknowledgements for the ESNT support).
- ◆ *The impact of low-energy nuclear excitations on neutrino-nucleus scattering at MiniBooNE and T2K kinematics,* V. Pandey, N. Jachowicz, **M. Martini**, R. González-Jiménez, J. Ryckebusch, T. Van Cuyck and N. Van Dessel, Phys. Rev. C **94**, 054609 (2016).
- ◆ *Influence of short-range correlations in neutrino-nucleus scattering,*
T. Van Cuyck, N. Jachowicz, R. González-Jiménez, **M. Martini**, V. Pandey, J. Ryckebusch and N. Van Dessel, Phys. Rev. C **94**, 024611 (2016).
- ◆ *Electron-neutrino scattering off nuclei from two different theoretical perspectives,*
M. Martini, N. Jachowicz, M. Ericson, V. Pandey, T. Van Cuyck and N. Van Dessel,
Phys. Rev. C **94**, 015501 (2016).
- ◆ *Assessing the role of nuclear effects in the interpretation of the MiniBooNE low-energy anomaly,*
M. Ericson, M. V. Garzelli, C. Giunti and **M. Martini**, Phys. Rev. D **93**, 073008 (2016).

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◆ *Nonobservable nature of the nuclear shell structure: Meaning, illustrations, and consequences*, T. Duguet, H. Hergert, J. D. Holt, and **V. Somà**, Phys. Rev. C **92**, 034313 (2015).
doi: <https://doi.org/10.1103/PhysRevC.92.034313>

◆ *Ab initio Bogoliubov coupled cluster theory for open-shell nuclei*, **A. Signoracci**, T. Duguet, G. Hagen, and G. R. Jansen, Phys. Rev. C **91**, 064320 (2015).
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◆ *Weakly bound Borromean structures of the exotic ${}^6,8\text{He}$ nuclei through direct reactions on proton*, V. Lapoux and N. Alamanos, Eur. Phys. J. A **51**, 91 (2015).
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2014

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Topical issue, "Perspectives on Nuclear Data for the Next Decade", International Workshop PND2-2, CEA DAM, October 2014.

◆ *Quasiparticle coupled cluster theory for pairing interactions*, T. M. Henderson, G. E. Scuseria, J. Dukelsky, **A. Signoracci**, and T. Duguet, Phys. Rev. C **89**, 054305 (2014). doi: <https://doi.org/10.1103/PhysRevC.89.054305>

◆ *Density functional theory with spatial-symmetry breaking and configuration mixing*, **T. Lesinski**, Phys. Rev. C **89**, 044305 (2014).

◆ *Ab initio self-consistent Gorkov-Green's function calculations of semi-magic nuclei: Numerical implementation at second order with a two-nucleon interaction*, **V. Somà**, C. Barbieri, and T. Duguet, Phys. Rev. C **89**, 024323 (2014).

◆ **A. Signoracci** and T. Duguet, *Evaluation of errors for ESPE in neutron-rich oxygen isotopes*, in preparation.

◆ **G. Potel**, A. Idini, F. Barranco, E. Vigezzi, R. A. Broglia, *Pairing interaction and two-nucleon transfer reactions*, arxiv nucl-th: 1404.1317 (2014) (NB: affiliation SPhN).

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◆ *Ab-initio Gorkov-Green's function calculations of open-shell nuclei*,
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In collaboration with experimentalists: F. Flavigny,..., A. Signoracci, et al., Limited Asymmetry Dependence of Correlations from Single Nucleon Transfer, Phys. Rev. Lett. **110**, 122503 (2013).

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◆ *Ab-initio take on effective single-particle energies in doubly closed shell nuclei*,
T. Duguet and **G. Hagen**, Phys. Rev. C **85**, 034330 (2012).

◆ *Self-consistent Gorkov Green's function calculations of one-nucleon spectral properties*,
V. Somà, T. Duguet, C. Barbieri, J. Phys. Conf. Ser. **337** (2012) 012001.

◆ *Self-consistent Green's functions calculation of the nucleon mean-free path*,
A. Rios, **V. Somà**, Phys. Rev. Lett. **108**, 012501 (2012).

2011

◆ *Neutrinoless double beta decay studied with configuration mixing methods*,
T.R. Rodríguez, G. Martinez-Pinedo, Progress in Particle and Nuclear Physics **66**, 436 (2011).

◆ *Gorkov self-consistent Green's function calculations of semi-magic nuclei*,
V. Somà, T. Duguet, C. Barbieri, J. Phys. Conf. Ser. **321** (2011) 012039.

◆ *Ab-initio self-consistent Gorkov-Green's function calculations of semi-magic nuclei*,
I. Formalism at second order with a two-nucleon interaction,
V. Somà, T. Duguet, C. Barbieri, Phys. Rev. C **84**, 064317 (2011).

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N. Michel, W. Nazarewicz, and M. Ploszajczak, Phys. Rev. C **82**, 044315 (2010).

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T. R. Rodríguez and G. Martinez-Pinedo, Phys. Rev. Lett. **105**, 252503 (2010).

2009

- ◆ *Particle-number restoration within the energy density functional formalism*
M. Bender, T. Duguet, D. Lacroix, Phys. Rev. C **79**, 044319 (2009).
- ◆ *Non-empirical pairing energy functional in nuclear matter and finite nuclei*
K. Hebeler, T. Duguet, **T. Lesinski**..., submitted to PRC ; arXiv:0904.3152.
- ◆ *An "archaeological" quest for galactic supernova neutrinos*, **R. Lazauskas**, C. Lunardini and C. Volpe,
Journ. Cosmol. And Astro. Physics **04** (2009) 029.
- ◆ *Up-to N3LO heavy-baryon chiral perturbation theory calculation for the M1 properties of three-nucleon systems*, Y-Ho Song, **R. Lazauskas**, and T-S Park, Phys. Rev. C **79**, 064002 (2009).
- ◆ *Critical temperature for α -particle condensation within a momentum-projected mean-field approach*,
T. Sogo, **R. Lazauskas**, G. Röpke, and P. Schuck, Phys. Rev. C **79**, 051301 (2009).
- ◆ *Density matrix renormalization group approach to two-fluid open many-fermion systems*,
J. Rotureau, **N. Michel**, W. Nazarewicz, M. Płoszajczak, and J. Dukelsky,
Phys. Rev. C **79**, 014304 (2009)
- ◆ *Shell model in the complex energy plane*
N. Michel, W. Nazarewicz, M. Płoszajczak..., J. Phys. G:Topical Review, **36**, 013101 (2009).
- ◆ *A simple and efficient numerical scheme to integrate non-local potentials*,
N. Michel, Eur. Phys. J. A **42**, 523 (2009)
- ◆ *Role of triaxiality in the ground state shape of neutron rich Yb, Hf, W, Os, and Pt isotopes*, L.M. Robledo,
R. Rodríguez -Guzman, P. Sarriguren,
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- ◆ *Evolution of nuclear shapes in medium mass isotopes from a microscopic perspective*, L. M. Robledo, **R. Rodríguez -Guzman**, P. Sarriguren, Phys. Rev. C **78**, 034314 (2008).
- ◆ *Configuration mixing of angular-momentum and particle-number projected triaxial Hartree-Fock-Bogoliubov states using the Skyrme energy density functional*, **M. Bender** and P.-H. Heenen, Phys. Rev. C **78**, 024309 (2008).
- ◆ *Effective shell model Hamiltonians from density functional theory: Quadrupolar and pairing correlations*, **R. Rodríguez -Guzman**, Y. Alhassid, G.F. Bertsch, Phys. Rev. C **77**, 064308 (2008).
- ◆ *Shape transitions in neutron-rich Yb, Hf, W, Os, and Pt isotopes within a Skyrme Hartree-Fock + BCS approach*, P. Sarriguren, **R. Rodríguez -Guzman**, L. M. Robledo, Phys. Rev. C **77**, 064322 (2008).
- ◆ *New efficient method for performing Hartree-Fock-Bogoliubov calculations for weakly bound nuclei*, M. Stoitsov, **N. Michel**, and K. Matsuyanagi, Phys. Rev. C **77**, 054301(2008).

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