

## List of publications of ESNT from 2004 to 2026

*Publications based on works performed by physicists in the framework of the ESNT projects during their stays as visitors at CEA. **In bold-italic 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 (affiliation or an acknowledgement for the support).*

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### Liste des publications

*(comportant une référence à l'ESNT, exemples : remerciements ou affiliation CEA, ESNT)*

2026 (Last update June 2026)

- *Ab initio self-consistent Gorkov-Green's function calculations of semi-magic nuclei. III. Formalism for the polarization propagator with two-nucleon interaction*,  
**G. Stellin**, T. Duguet and V. Somà, [to be submitted to the European Physical Journal A].
- *Electromagnetic Selection Rules for  $^{24}\text{Mg}$  in a 6Alpha Cluster Model with  $D_{\{4h\}}$  Symmetry*  
**G. Stellin** and K-H. Speidel, J. of Phys. G. **53**, 025102 (2026), [ArXiv:2412.17782]  
<https://doi.org/10.48550/arXiv.2412.17782>

## 2025

- *Mean-field approximation on steroids: exact description of the deuteron*,  
**B. Bally**, A. Scalesi, V. Somà, L. Zurek, T. Duguet,  
Eur. Phys. J. A **61**, 140 (2025). <https://doi.org/10.1140/epja/s10050-025-01596-4>  
<https://doi.org/10.48550/arXiv.2410.03356> Submitted to EPJA (2024)  
A. Scalesi et al., (Acknowledgements to ESNT support).
- *Exploiting  $^{20}\text{Ne}$  isotopes for precision characterizations of collectivity in small systems*,  
G. Giacalone, B. Bally, G. Nijs, S. Shen, T. Duguet, J.-P. Ebran, S. Elhatisari, M. Frosini, T. A. Lähde,  
D. Lee, B.-N. Lu, Y.-Z. Ma, U.-G. Meißner, J. Noronha-Hostler, C. Plumberg, T. R. Rodríguez,  
R. Roth, W. van der Schee, V. Somà,  
Phys. Rev. Lett. **135**, 012302 (2025). <https://doi.org/10.1103/k8rb-jgvq> arXiv:2402.05995 (2024)  
+ Acknowledgements to ESNT support.  
"We acknowledge the participants of the EMMI Rapid Reaction Task Force "Nuclear physics confronts relativistic collisions of isobars" and of the ESNT workshop "Deciphering nuclear phenomenology across energy scales" for fruitful discussions about the applications of  $^{20}\text{Ne}$ , that have triggered this project."
- *Anisotropic flow in fixed-target  $^{208}\text{Pb}+^{20}\text{Ne}$  collisions as a probe of quark-gluon plasma*,  
G. Giacalone, W. Zhao, B. Bally, S. Shen, T. Duguet, J.-P. Ebran, S. Elhatisari, M. Frosini, T. A. Lähde,  
D. Lee, B.-N. Lu, Y.-Z. Ma, U.-G. Meißner, G. Nijs, J. Noronha-Hostler, C. Plumberg, T. R. Rodríguez,  
R. Roth, W. van der Schee, C. Shen and V. Somà,  
Phys. Rev. Lett. **134**, 082301 (2025).  
<https://doi.org/10.1103/PhysRevLett.134.082301> <https://doi.org/10.48550/arXiv.2405.20210>
- *Ab initio nuclear shape coexistence and emergence of island of inversion around  $N = 20$* ,  
E. F. Zhou, C. R. Ding, J. M. Yao, B. Bally, H. Hergert, C.F. Jiao, T.R. Rodriguez,  
Phys. Lett. B **865**, 139464 (2025). <https://doi.org/10.1016/j.physletb.2025.139464>  
<https://doi.org/10.48550/arXiv.2410.23113>

2024

- *Smooth trends in fermium charge radii and the impact of shell effects*, J. Warbinek, E. Rickert, S. Raeder *et al.* (**B. Bally**), Nature **634**, 1075–1079 (2024) <https://doi.org/10.1038/s41586-024-08062-z>
- *Shell-model study of  $^{28}\text{Si}$ : Coexistence of oblate, prolate, and superdeformed shapes*, D. Frycz, J. Menéndez, A. Rios, **B. Bally**, T. R. Rodríguez, and A. M. Romero, Phys. Rev. C **110**, 054326 (2024) <https://doi.org/10.1103/PhysRevC.110.054326>
- *Wave function matching for solving the quantum many-body problems*, S. Elhatisari, *et al.* (**G. Stellan**). Nature **630**, 59–63 (2024). <https://doi.org/10.1038/s41586-024-07422-z> arXiv:2210.17488 (2022). *Fait marquant - Highlight -IRFU*
- *Ab initio uncertainty quantification of neutrinoless double-beta decay in  $^{76}\text{Ge}$* , A. Belley, J. M. Yao, **B. Bally**, J. Pitcher, J. Engel, H. Hergert, J. D. Holt, T. Miyagi, T. R. Rodriguez, A. M. Romero, S. R. Stroberg, X. Zhang, Phys. Rev. Lett. **132**, 182502 (2024). doi: 10.1103/PhysRevLett.132.182502 arXiv:2308.15634 (2023) *Fait marquant- Highlight -IRFU* [Calcul ab initio de l'élément de matrice nucléaire pour la désintégration double bêta sans émission de neutrino du  \$^{76}\text{Ge}\$  \[https://irfu.cea.fr/Phoce/Vie\\\_des\\\_labos/Ast/ast.php?t=fait\\\_marquant&id\\\_ast=5268\]\(https://irfu.cea.fr/Phoce/Vie\_des\_labos/Ast/ast.php?t=fait\_marquant&id\_ast=5268\)](https://irfu.cea.fr/Phoce/Vie_des_labos/Ast/ast.php?t=fait_marquant&id_ast=5268)
- *Symmetry-projected variational calculations with the numerical suite TAURUS II. Configuration mixing of symmetry-projected reference states*, **B. Bally**, T. R. Rodriguez, Eur. Phys. J. A **60**, 62 (2024). doi: 10.1140/epja/s10050-024-01271-0 arXiv:2401.00941 (2024).
- *Relativistic meson-exchange currents in semi-inclusive lepton scattering*, V. Belocchi, M. B. Barbaro, A. De Pace, and M. Martini, Phys. Rev. C **109**, 065502 (2024) *Work partially carried out during the ESNT **workshop** “Meson Exchange Current contributions in semi inclusive lepton nucleus scattering” organized in January 29<sup>th</sup> till 2<sup>nd</sup> of February 2024 (Acknowledgements to ESNT support).*

## 2023

◆ *The shape of gold*, **B. Bally**, G. Giacalone and M. Bender, Eur. Phys. J. A **59**, 58 (2023).  
doi:10.1140/epja/s10050-023-00955-3

## 2022

◆ *Magnetic dipole moments as a strong signature for  $\alpha$ -clustering in even-even self-conjugate nuclei*,  
**G. Stellan**, K.-H. Speidel, U.-G. Meißner, Eur. Phys. J. A **58**, 208 (2022).  
arXiv:2205.10388 doi : 10.1140/epja/s10050-022-00850-3

◆ *Structure of 128,129,130Xe through multi-reference energy density functional calculations*,  
**B. Bally**, G. Giacalone, M. Bender, Eur. Phys. J. A **58**, 187 (2022).  
arXiv:2207.13576 doi: 10.1140/epja/s10050-022-00833-4

◆ *Evidence of the Triaxial Structure of 129Xe at the Large Hadron Collider*,  
**B. Bally**, M. Bender, G. Giacalone, V. Somà, Phys. Rev. Lett. **128**, 082301 (2022)  
*Fait marquant- Highlight -IRFU 2022 - Imaging nuclei with relativistic ion collisions*  
[https://irfu.cea.fr/en/Phoce/Vie\\_des\\_labos/Ast/ast.php?t=fait\\_marquant&id\\_ast=5069](https://irfu.cea.fr/en/Phoce/Vie_des_labos/Ast/ast.php?t=fait_marquant&id_ast=5069)

## 2021

◆ *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

◆ *Nucleonic localisation and alpha radioactivity*, J-P. Ebran, E. Khan, **R-D. Lasserri**,  
J. Phys. G: Nucl. Part. Phys. **48**, 025106 (2021). arXiv: 2001.07436 doi:10.1088/1361-6471/abcf25

◆ *Bogoliubov many-body perturbation theory under constraint*,  
P. Demol, M. Frosini, **A. Tichai**, V. Somà, T. Duguet  
Annals of Physics **424**, 168358 (2021). arXiv:2002.02724 doi: 10.1016/j.aop.2020.168358

◆ *ADG: Automated generation and evaluation of many-body diagrams. II. Particle-number projected Bogoliubov many-body perturbation theory*, P. Arthuis, **A. Tichai**, J. Ripoché, T. Duguet,  
Comput. Phys. Comm. **261**, 107677 (2021). arXiv:2007.01661 doi 10.1016/j.cpc.2020.107677  
Associated code available on <https://github.com/adgproject/adg/>

◆ *Many-body perturbation theories for finite nuclei*,  
**A. Tichai**, R. Roth, T. Duguet, contribution to 'Frontiers in Physics' (2020). arXiv:2001.10433

◆ *Symmetry reduction of tensor networks in many-body theory. I. Automated symbolic evaluation of SU(2) algebra*, **A. Tichai**, R. Wirth, J. Ripoché, T. Duguet arXiv:2002.02724  
Accompanying source code available at [github.com/radnut/amc](https://github.com/radnut/amc)

- ◆ *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
- ◆ *Zero-pairing limit of Hartree-Fock-Bogoliubov reference states*,  
 T. Duguet, B. Bally, **A. Tichai**,  
 Phys. Rev. C **102**, 054320 (2020). arXiv:2006.02871 doi 10.1103/PhysRevC.102.054320
- ◆ *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
- ◆ *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.  
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 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
- ◆ *Microscopic description of the self-conjugate  $^{108}\text{Xe}$  and  $^{104}\text{Te}$  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
- ◆ *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,  
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 Phys.Lett.B **802**,135215 (2020). doi: 10.1016/j.physletb.2020.135215
- ◆ *Novel chiral Hamiltonian and observables in light and medium-mass nuclei*,  
 V. Somà, P. Navràtil, **F. Raimondi**, C. Barbieri, and T. Duguet,  
 Phys.Rev. C **101**, 014318 (2020). doi: 10.1103/PhysRevC.101.014318
- ◆ *Improved many-body expansions from eigenvector continuation*,  
 P. Demol, T. Duguet, A. Ekström, M. Frosini, K. Hebeler, S. König, D. Lee, A. Schwenk, V. Somà, **A. Tichai**,  
 Phys. Rev. C **101**, 041302 (2020) arXiv:1911.12578 doi: 10.1103/PhysRevC.101.041302
- ◆ *Normal-ordered k-body approximation in particle-number-breaking theories*,  
 J. Ripoche, **A. Tichai**, T. Duguet, Eur. Phys. J. A **56**, 40 (2020).  
 arXiv:1908.00765 doi: 10.1140/epja/s10050-020-00045-8

- ◆ *Quasifree Neutron Knockout from  $^{54}\text{Ca}$  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. Lasseri, J.-P. Ebran, *Comp. Phys. Comm.* **240**, 202-227 (2019). arXiv :1809.01187 doi : 10.1016/j.cpc.2018.11.023

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.pnpnp.2018.01.006

- ◆ *De-excitation of the strongly coupled band in  $^{177}\text{Au}$  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  $\gamma$  emission from decaying exotic nuclei*, A. Gottardo, D. Verney, I. Deloncle, S. Peru, C. Delafosse, S. Rocchia, 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  $^{110}\text{Zr}$* , 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  $\gamma$  strength function of the odd-even nucleus  $^{115}\text{In}$ ,*  
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  $\gamma$ -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  
*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).*
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