

# Danilo Gambacurta

*abbreviated CV*

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## Personal Information

*Gender:* Male  
*Place and date of birth:* Piazza Armerina (Italy), October 1978  
*Nationality:* Italian  
*Telephone Number* +39095542648  
*Work address* Via S. Sofia, 62, 95125 Catania CT, Italy  
*E-mail address:* [danilo.gambacurta@lns.infn.it](mailto:danilo.gambacurta@lns.infn.it)  
*Current Work Position* LNS-INFN

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## Education

- ✓ **December 2002, Degree in Physics (Master 2), 110/110 cum laude**,  
(University of Catania, Italy);  
Thesis: “An extension of the Random Phase Approximation and its application to metallic clusters”,  
Supervisors: Prof. F. Catara, Dr. M. Sambataro
- ✓ **2003-2006, Ph.D. in Physics, Defense of Thesis in February 2007**  
(University of Catania, Italy)  
Thesis: “Collective Excitations and Correlations in Many-Body Systems”,  
Supervisors: Prof. F. Catara, Dr. M. Sambataro

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## Professional activities (chronological order)

- ✓ Post-graduate scholarship Dipartimento di Fisica e Astronomia di Catania (9 months, 2003),  
Research Subject: “Nuclear theoretical physics and many-body systems”;
- ✓ Post-doc Fellowship, Consortium COMETA (from September 2006 to October 2008),  
Research Subject: “Grid implementation of codes for the microscopic study of many-body systems”
- ✓ Post-doc Fellowship at the University of Catania from 3 Novembre 2008 to 3 June 2011,  
Research Subject: “Study of nuclear collective excitations within microscopic approaches and their extensions”;
- ✓ Three years research contract (CDD CNRS) at GANIL from 20 June 2011 to 19 June 2014,  
Research Subject: “Symmetry breaking and restoration within the energy density functional theory”,
- ✓ Post-doc Fellowship at the University of Catania from 21 September 2014 to 20 September 2015  
Research Subject: “Microscopic study of structure and reactions of exotic nuclei “
- ✓ Research position at ELI-NP Magurele town, Ilfov county, Romania
- ✓ **Current Position:** INFN researcher (from 1.1.2019); first researcher (ricercatore 2<sup>nd</sup> livello, since 2020)

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## Language skills

Italian (native)  
English (fluent spoken and written)  
French (fluent spoken and written)

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## Main expertise, competences and computational tools

- Mean-field calculations: HF for spherical and deformed nuclei, HF+BCS for superfluid systems;
- Self-consistent HF+RPA calculations: nuclear response and giant resonances;
- Second RPA calculations: spreading width and fragmentation, double excitations, low-lying states, ... ;
- Shell model techniques: Nushellx code and codes developed by myself for pairing HamiltoniansM
- Coupled Channel Calculations: reaction calculations based on microscopic inputs;
- Many-body techniques at finite- temperature (FT-BCS, projected FT-BCS,...)

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## Main Research Interests

Many-body systems, Nuclear structure, Nuclear dynamics and reactions, Unstable and exotic nuclei, Mean-field and beyond-mean field approaches, pairing and super-fluid systems, Shell model calculations, Skyrme/Gogny Hartree-Fock plus RPA, Second RPA, Collective modes, Giant Resonances, Pygmy modes, Coupled Channel Calculations, Energy density functional in nuclear systems, Broken Symmetries, Thermodynamics of finite systems, High-performance computing. Beta Decays. Neutrino-less double beta decay

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## Coordination and Institutional Roles

- CSN4 Coordinator on the LNS Council (01-08-2020–31-07-2023)
- CSN4 Coordinator on the LNS Council (01-08-2023–31-07-2026)
- Member of the CSN4 Working Group on Evaluation (GLV) since 24-03-2022
- Referee for CSN4 scientific line 3 from June 2022 to February 2023
- National Coordinator of the CSN4 MONSTRE research initiative (2023–2025)
- Member of the biennial committee (2022–2024) responsible for selection procedures for research fellowships at the Laboratori Nazionali del Sud
- Member of the selection committee for the 2021 “Sergio Fubini” National Prize

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## Organizations of workshops e conferences

- “Structure and Dynamics of nuclei far from stability“, 15-16 September 2011, Dipartimento di Fisica e Astronomia dell'Università di Catania, Local Committee
- NuSym 2022: “10th International Symposium on Nuclear Symmetry Energy“, INFN Sezione di Catania e LNS, 26-30 Settembre 2022, Local Committee
- “7th International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX7)“, 11-16 Giugno 2023, Catania (Italy);, Local Committee
- “Recent developments and challenges for (Q)RPA-based methods“, 07/07/2026 - 09/07/2026
- CEA Saclay, Gif-sur-Yvette, Francia, Comitato Organizzativo
- “NuSym 2026, XIVth International Symposium on Nuclear Symmetry Energy“, Catania (Italy), on September 14-18, 2026, Local Committee
- “Enupec 2027, VIIth European Nuclear Physics Conference“, Catania Settembre 2027, Local Committee

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## Awards and Recognition of Individual Achievements

- Italian National Scientific Qualification for Associate Professor, competition sector 02/A2. Valid from 13/07/2018 to 13/07/2029; awarding institution: MIUR.
- Qualification for the position of *maître de conférences*, France, 2013. Awarding institution:

Ministère de l'Enseignement supérieur et de la Recherche scientifique.

- Awarded a FELLINI Programme fellowship in 2020 by INFN, co-funded by the Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie COFUND action. Project title: “Beyond mean-field models for the description of neutrinoless double-beta decay.” (Fellowship declined following appointment at INFN on 01/11/2019.)
- PhD scholarship in Physics, 19th cycle, University of Catania.

## Publications on peer-review journals

1. *Recent applications of the subtracted second RPA method*, D. Gambacurta, M. Grasso, Progress in Particle and Nuclear Physics, Volume 150, 2026, 104251, ISSN 0146-6410, <https://doi.org/10.1016/j.pnpnp.2026.104251>.
2. *Heavy-ion double-charge-exchange reactions as probes for two-body transition densities*, J. I. Bellone, M. Colonna, D. Gambacurta, H. Lenske, Physical Review C 111, L061602 (2025).
3. *Nuclear beta-decay half-lives within the subtracted second random-phase approximation*, D. Gambacurta, M. Grasso, The European Physical Journal A 61, 146 (2025).
4. *Theory of Majorana-Type Heavy Ion Double Charge Exchange Reactions by Pion-Nucleon Isotensor Interactions*, H. Lenske, J. Bellone, M. Colonna, D. Gambacurta, Universe 10(5), 202 (2024).
5. *Symmetry-restored Skyrme-random-phase-approximation calculations of the monopole strength in deformed nuclei*, A. Porro, G. Colò, T. Duguet, D. Gambacurta, V. Somà, Physical Review C 109, 044315 (2024).
6. *Induced Isotensor Interactions in Heavy-Ion Double-Charge-Exchange Reactions and the Role of Initial and Final State Interactions*, H. Lenske, J. Bellone, M. Colonna, D. Gambacurta, J.-A. Lay, Universe 10, 93 (2024).
7. *Nuclear physics midterm plan at LNS*, C. Agodi et al., European Physical Journal Plus 138, 1038 (2023).
8. *Shedding light on nuclear aspects of neutrinoless double beta decay by heavy-ion double charge exchange reactions*, F. Cappuzzello et al., Progress in Particle and Nuclear Physics 128, 103999 (2023).
9. *Coexistence of quartets and pairs in even-even  $N > Z$  nuclei*, M. Sambataro, N. Sandulescu, D. Gambacurta, Nuclear Physics A 1036, 122675 (2023).
10. *Proton-neutron pairing and binding energies of nuclei close to the  $N = Z$  line*, D. Negrea, N. Sandulescu, D. Gambacurta, Physical Review C 105, 034325 (2022).
11. *Quenching of Gamow-Teller strengths and two-particle–two-hole configurations*, D. Gambacurta, M. Grasso, Physical Review C 105, 014321 (2022).
12. *Nuclear Matrix Elements for Heavy Ion Sequential Double Charge Exchange Reactions*, H. Lenske, J. Bellone, M. Colonna, D. Gambacurta, Universe 7(4), 98 (2021).
13. *Gamow-Teller Strength in  $^{48}\text{Ca}$  and  $^{78}\text{Ni}$  with the Charge-Exchange Subtracted Second Random-Phase Approximation*, D. Gambacurta, M. Grasso, J. Engel, Physical Review Letters 125, 212501 (2020).
14. *Isoscalar monopole and quadrupole modes in Mo isotopes: Microscopic analysis*, G. Colò, D. Gambacurta et al., Physics Letters B 811, 135940 (2020).
15. *Beyond-mean-field effects on the symmetry energy and its slope from the low-lying dipole response of  $^{68}\text{Ni}$* , M. Grasso, D. Gambacurta, Physical Review C 101, 064314 (2020).

16. *Soft breathing modes in neutron-rich nuclei with the subtracted second random-phase approximation*, D. Gambacurta, M. Grasso, O. Sorlin, Physical Review C 100, 014317 (2019).
17. *Isovector and isoscalar proton-neutron pairing in  $N > Z$  nuclei*, D. Negrea et al., Physical Review C 98, 064319 (2018).
18. *Beyond-mean-field effective masses in the nuclear Fermi liquid from axial breathing modes*, M. Grasso, D. Gambacurta, O. Vasseur, Physical Review C 98, 051303(R) (2018).
19. *Systematic study of giant quadrupole resonances with the subtracted second random-phase approximation*, O. Vasseur, D. Gambacurta, M. Grasso, Physical Review C 98, 044313 (2018).
20. *Electric dipole strength and dipole polarizability in  $^{48}\text{Ca}$  with second RPA*, D. Gambacurta, M. Grasso, O. Vasseur, Physics Letters B 777, 163–168 (2018).
21. *Isovector and isoscalar pairing in odd–odd  $N = Z$  nuclei within a quartet approach*, D. Negrea, N. Sandulescu, D. Gambacurta, Progress of Theoretical and Experimental Physics 2017, 073D05.
22. *Combining symmetry breaking and restoration with configuration interaction*, J. Ripoché et al., Physical Review C 95, 014326 (2017).
23. *Second RPA calculations with the Skyrme and Gogny interactions*, D. Gambacurta, M. Grasso, European Physical Journal A 52, 201 (2016).
24. *Nuclear excitations as coupled one and two random-phase-approximation modes*, D. Gambacurta et al., Physical Review C 93, 024309 (2016).
25. *Proton-neutron pairing in  $N = Z$  nuclei: Quartetting versus pair condensation*, N. Sandulescu, D. Negrea, D. Gambacurta, Physics Letters B 751, 348 (2015).
26. *Subtraction method in the second random-phase approximation*, D. Gambacurta, M. Grasso, J. Engel, Physical Review C 92, 034303 (2015).
27. *Effects of deformation on neutron-proton pairing in  $N = Z$  nuclei*, D. Gambacurta, D. Lacroix, Physical Review C 91, 014308 (2015).
28. *Pairing and specific heat in hot nuclei*, D. Gambacurta, D. Lacroix, N. Sandulescu, Physical Review C 88, 034324 (2013).
29. *Quantal corrections to mean-field dynamics including pairing*, D. Lacroix, D. Gambacurta, S. Ayik, Physical Review C 87, 061302(R) (2013).
30. *On the description of two-particle transfer in superfluid systems*, D. Gambacurta, D. Lacroix, Physical Review C 86, 064320 (2012).
31. *Second random-phase approximation with the Gogny force*, D. Gambacurta et al., Physical Review C 86, 021304(R) (2012).
32. *Projected quasiparticle perturbation theory*, D. Lacroix, D. Gambacurta, Physical Review C 86, 014306 (2012).
33. *Thermodynamical properties of small superconductors*, D. Gambacurta, D. Lacroix, Physical Review C 85, 044321 (2012).
34. *Excitations of pygmy dipole resonances*, E. G. Lanza et al., Physical Review C 84, 064602 (2011).
35. *Low-lying dipole response in  $^{40,48}\text{Ca}$  with second RPA*, D. Gambacurta et al., Physical Review C 84, 034301 (2011).
36. *Determination of local energy density functionals from BHF*, D. Gambacurta et al., Physical Review C 84, 024301 (2011).
37. *Iterative variational approach to finite many-body systems*, M. Sambataro, D. Gambacurta, L. Lo Monaco, Physical Review B 83, 045102 (2011).
38. *Residual interaction in second RPA with density-dependent forces*, D. Gambacurta, M. Grasso, F. Catara, Journal of Physics G 38, 035103 (2011).
39. *Collective nuclear excitations with Skyrme–Second RPA*, D. Gambacurta, M. Grasso, F. Catara, Physical Review C 81, 054312 (2010).

40. *Extended second random-phase approximation applied to metallic clusters*, D. Gambacurta, F. Catara, Physical Review B 81, 085418 (2010).
41. *Collective modes within Skyrme-second RPA*, M. Grasso, D. Gambacurta, F. Catara, Modern Physics Letters A 25, 1919–1922 (2010)
42. *Self-consistent extension of RPA beyond particle-hole configurations*, D. Gambacurta et al., Physical Review C 80, 014303 (2009).
43. *Multiphonon excitations and pygmy resonances in tin isotopes*, E. G. Lanza et al., Physical Review C 79, 054615 (2009).
44. *Second random-phase approximation studies in metallic clusters*, D. Gambacurta, F. Catara, Physical Review B 79, 085403 (2009).
45. *Particle-hole excitations within self-consistent RPA*, D. Gambacurta, F. Catara, Physical Review B 77, 205434 (2008).
46. *Solvable many-level pairing model in a boson formalism*, D. Gambacurta, M. Sambataro, F. Catara, Physical Review C 73, 014310 (2006).
47. *Extension of the second random-phase approximation*, D. Gambacurta et al., Physical Review C 73, 024319 (2006).
48. *Configuration interaction study of single and double dipole plasmon excitations in Na<sub>8</sub>*, F. Catara, D. Gambacurta et al., Physics Letters A 349, 345 (2006).

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## Proceedings

1. *Investigating double charge-exchange transitions with nuclear reactions*, Colonna M. , Bellone J.I. , Gambacurta D. , Lenske H., EPJ Web Conf. Volume 342, 2025, 01007
2. *Status of the NUMEN Construction*, Pierroutsakou D et al., EPJ Web Conf. 333, 2025, 03006
3. *Formal theory of heavy ion double charge exchange reactions*, H. Lenske, J. Bellone, M. Colonna, D. Gambacurta, J.-A. Lay, EPJ Web of Conferences 292, 04001 (2024).
4. *Modeling double charge exchange processes occurring in heavy ion reactions*, J. I. Bellone, M. Colonna, D. Gambacurta, H. Lenske, EPJ Web of Conferences 292, 05002 (2024).
5. *Recent studies within the Subtracted Second RPA*, D. Gambacurta, Il Nuovo Cimento C 47, 22 (2024).
6. *New developments in modeling Heavy Ion Double Charge Exchange reactions*, J. I. Bellone, M. Colonna, D. Gambacurta, H. Lenske, Il Nuovo Cimento C 47, 38 (2024).
7. *Nuclear double charge exchange reactions by induced isotensor interactions*, H. Lenske, J. Bellone, M. Colonna, D. Gambacurta, J.-A. Lay, Il Nuovo Cimento C 47, 367 (2024).
8. *Theoretical modelling of Heavy Ion Double Charge Exchange reactions and calculations for the NUMEN project*, J. I. Bellone, M. Colonna, D. Gambacurta, H. Lenske, Il Nuovo Cimento C 47, 352 (2024).
9. *Gamow-Teller excitations in the Subtracted Second RPA approach*, D. Gambacurta, Journal of Physics: Conference Series 2453, 012017 (2023).
10. *Heavy-ion induced quasi-elastic reactions in view of the NUMEN project*, M. Cavallaro et al., Journal of Physics: Conference Series 2453, 012006 (2023).
11. *Double charge-exchange reactions for the nuclear matrix elements of neutrinoless double beta decay*, M. Cavallaro et al., Journal of Physics: Conference Series 2586, 012132 (2023).
12. *New high intensity Heavy-Ion beams at INFN-LNS: NUMEN project status and perspectives*, C. Agodi et al., Journal of Physics: Conference Series 2586, 012053 (2023).
13. *Nuclear incompressibility from spherical and deformed nuclei*, D. Gambacurta, G. Colò, A. Pastore, Journal of Physics: Conference Series 1643, 012129 (2020).
14. *Microscopic description of the GDR and PDR modes: an application to the <sup>48</sup>Ca case*, D. Gambacurta et al., AIP Conference Proceedings 2076, 040003 (2019).

15. *Subtraction method in the Second Random Phase Approximation*, D. Gambacurta, Journal of Physics: Conference Series 966, 012050 (2018).
16. *Beyond-mean-field corrections within the second random-phase approximation*, M. Grasso, D. Gambacurta, J. Engel, Journal of Physics: Conference Series 724, 012018 (2016).
17. *Interplay between proton-neutron pairing and deformation in self-conjugate medium-mass nuclei*, D. Gambacurta, D. Lacroix, EPJ Web of Conferences 117, 04005 (2016).
18. *Proton-neutron pairing and alpha-type condensation in nuclei*, N. Sandulescu, D. Negrea, D. Gambacurta, AIP Conference Proceedings 1681, 040013 (2015).
19. *Nuclear pairing correlations within and beyond HFB-BCS models*, D. Gambacurta, D. Lacroix, Journal of Physics: Conference Series 580, 012054 (2015).
20. *Pairing and specific heat in Dy and Yb isotopes*, D. Gambacurta, D. Lacroix, N. Sandulescu, Journal of Physics: Conference Series 533, 012012 (2014).
21. *Beyond-mean-field models for correlated nucleons: applications to O-16 and Ca-48*, M. Grasso, D. Gambacurta, F. Catara, Proceedings of the French-Japanese Symposium on Nuclear Structure Problems, 110–115 (2013).
22. *Pairing and thermodynamical properties of finite systems with fixed number of particles*, D. Gambacurta, D. Lacroix, EPJ Web of Conferences 38 (2012).
23. *Low-lying dipole response in 40,48Ca within the second RPA*, D. Gambacurta, M. Grasso, F. Catara, AIP Conference Proceedings 1491, 186–189 (2012).
24. *Giant and pygmy dipole resonances in neutron-rich nuclei*, A. Vitturi, E. G. Lanza, M. V. Andres, F. Catara, D. Gambacurta, Journal of Physics: Conference Series 267, 012006 (2011).
25. *The Landau–Migdal parameters from Brueckner theory*, D. Gambacurta, U. Lombardo, W. Zuo, Physics of Atomic Nuclei 74, 1424–1434 (2011).
26. *Collective excitations in Random Phase Approximation and beyond*, F. Catara, D. Gambacurta, M. Grasso, M. Sambataro, Journal of Physics: Conference Series 267, 012047 (2011).
27. *Second RPA with Skyrme interaction*, D. Gambacurta, M. Grasso, F. Catara, Journal of Physics: Conference Series 267, 012052 (2011).
28. *Collective excitations in metallic clusters within the second RPA*, D. Gambacurta, F. Catara, Journal of Physics: Conference Series 168, 012012 (2009).
29. *Pygmy resonances in tin isotopes within a microscopic multiphonon approach*, E. G. Lanza et al., Journal of Physics: Conference Series 168, 012014 (2009).
30. *Pygmy dipole resonances: nuclear and Coulomb excitations*, E. G. Lanza, A. Vitturi, M. V. Andres, F. Catara, D. Gambacurta, Nuclear Theory 29, 162 (2010).
31. *Excitation of pygmy dipole resonance in neutron-rich nuclei via Coulomb and nuclear field*, A. Vitturi, E. G. Lanza, M. V. Andres, F. Catara, D. Gambacurta, Pramana 75, 73 (2010).
32. *Theoretical physics use cases in the PI2S2 project*, D. Gambacurta, Proceedings of GRID Open Days at the University of Palermo, 264 (2007).
33. *Bosonic treatment of pairing correlations in a solvable many-level model*, D. Gambacurta, M. Sambataro, F. Catara, AIP Conference Proceedings 802, 125–128 (2005).
34. *Pairing correlations in finite nuclear systems*, D. Gambacurta, M. Sambataro, Proceedings of the International Conference on Nuclear Structure and Related Topics, Dubna (2003).
35. *Pairing correlations in finite nuclear systems*, D. Gambacurta, M. Sambataro, Yad. Fiz. 67, 1804 (2004); Physics of Atomic Nuclei 67, 1776 (2004).

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## International conferences and workshops

1. *Coherence and Collectivity in nuclear excitations*, Many-body correlations, phase transitions, and clustering: how to identify and quantify them? Saclay France, September 7-11, 2026
2. *Gamow-Teller excitations and beta-decay within the Subtracted Second RPA*, Fifth joint Workshop IRN-FENMTO, COPIGAL and POLITA (Padova, Italia, 04–06.05.2026) (invited)
3. *Gamow-Teller excitations and beta-decay within the Subtracted Second RPA*, COMEX8 – 8th International Conference on Collective Motion in Nuclei under Extreme Conditions (Tallahassee, USA, 15–19.12.2025) (invited)
4. *Subtracted Second RPA studies of Gamow-Teller excitations and beta-decay*, Fifth Gogny Conference: Nuclear structure and reactions (Paris, Francia, 10–13.12.2024) (invited)
5. *The Second RPA and its connection to the nuclear multipole response*, Nuclear excitations and resonances (Saclay, Francia, 18–22.11.2024) (invited)
6. *Spherical and deformed nuclei within the EDF framework*, Multifaceted aspects of collaborative research on nuclear structure at UNIMI and INFN-MI (Milano, Italia, 17–18.10.2024)
7. *Gamow-Teller excitations and beta-decay within the Subtracted Second RPA*, International Symposium on Nuclear Science ISNS-24 (Sofia, Bulgaria, 09–13.09.2024) (invited)
8. *Gamow-Teller excitations and beta-decay within the Subtracted Second RPA*, 10th International Conference on Quarks and Nuclear Physics QNP2024 (Barcellona, Spagna, 08–12.07.2024)
9. *Nuclear response and decay processes within beyond mean-field methods*, INFN2024 – Sesto incontro nazionale di fisica nucleare (Trento, Italia, 26–28.02.2024) (invited)
10. *Recent applications of the Subtracted Second RPA for nuclear soft modes*, Topical Workshops on Modern Aspects of Nuclear Structure (Bormio, Italia, 06–11.02.2023) (invited)
11. *Proton-Neutron Pairing within the EDF framework*, Experimental and Theoretical Aspects of Neutron-Proton Pairing ESNT workshop (Saclay, Francia, 04–08.09.2023) (invited)
12. *Gamow-Teller excitations within the Subtracted Second RPA*, Joint LIA COLL-AGAIN, COPIGAL, and POLITA Workshop (Francia, 15–18.11.2022) (invited)
13. *Recent studies on the dipole nuclear excitations within the Subtracted Second RPA*, Giant and Soft Modes of Excitation in Nuclear Structure and Astrophysics (ECT\* Trento, Italia, 24–28.10.2022) (invited)
14. *Recent extensions of the Second RPA method and its applications to soft monopole modes*, Advances on giant nuclear monopole excitations and applications to multi-messenger astrophysics (ECT\* Trento, Italia, 11–15.07.2022) (invited)
15. *Gamow-Teller excitations in the Subtracted Second RPA approach*, 13th International Spring Seminar on Nuclear Physics (Sant'Angelo d'Ischia, Italia, 16–20.05.2022)
16. *Recent applications of the subtracted second random phase approximation*, Nuclear Structure and Dynamics NSD2019 (Venezia, Italia, 12–18.05.2019)
17. *Electric dipole strength and dipole polarizability in  $^{48}\text{Ca}$  within a fully self-consistent second random-phase approximation*, Collective Motion in Nuclei under Extreme Conditions COMEX6 (Città del Capo, Sud Africa, 29.10–02.11.2018)
18. *Electric dipole strength and dipole polarizability in  $^{48}\text{Ca}$  within a fully self-consistent second random-phase approximation*, NUSPIN 2018 (Valenzia, Spagna, 24–28.06.2018)
19. *The subtraction procedure within the Skyrme-SRPA model: formalism and applications*, International Symposium on Physics of Unstable Nuclei 2017 (Vietnam, 25–30.09.2017)
20. *Subtraction method in the SRPA approximation with Skyrme and Gogny interactions*, 12th International Spring Seminar on Nuclear Physics (Sant'Angelo d'Ischia, Italia, 15–19.05.2017)
21. *Subtraction method in the Skyrme-second random-phase approximation*, Unraveling the complexity

- of nuclear systems (ECT\* Trento, Italia, 06–10.02.2017) (invited)
22. *Multipole response in atomic nuclei within the Second Random Phase Approximation*, Nuclear Photonics 2016 (Monterey, USA, 15–20.10.2016)
  23. *Proton-neutron pairing in odd-odd  $N=Z$  nuclei*, ECT\* Trento Workshop (19–23.09.2016)
  24. *Second RPA calculations with the Skyrme and Gogny interactions*, First Daniel Gogny's Conference (Francia, 08–11.12.2015)
  25. *Interplay between proton-neutron pairing and deformation in  $N=Z$  medium mass nuclei*, Neutron-Proton Correlations Workshop (Hong Kong, 06–09.07.2015) (invited)
  26. *Interplay between proton-neutron pairing and deformation in  $N=Z$  medium mass nuclei*, Nucleus-Nucleus Collisions Conference (Catania, Italia, 21–26.06.2015)
  27. *Proton-neutron pairing in  $N=Z$  medium-mass nuclei within a beyond-mean-field approach*, NNINT2015 (Catania, Italia, 18–20.06.2015)
  28. *Collective Modes in Second RPA with Skyrme and Gogny Interaction*, Joint LEA COLLIGA – COPIGAL Workshop (Paris, Francia, 07–10.01.2014)
  29. *Collective Modes in Second RPA with Skyrme and Gogny Interaction*, French-Japanese Symposium on Nuclear Structure Problems (Paris, Francia, 30.09–03.10.2013)
  30. *Pairing and heat capacity in Dy and Yb isotopes at finite temperature*, XX International School on Nuclear Physics (Varna, Bulgaria, 16–22.09.2013)
  31. *Finite temperature canonical description of pairing, condensation and heat capacity*, IN2P3-BLTP Workshop (Dubna, Russia, 22–27.07.2013)
  32. *Pairing correlations at finite temperature*, Saclay Workshop (Francia, 27–29.05.2013)
  33. *Pairing properties of finite-systems within models restoring the good particle number symmetry*, GANIL (Caen, Francia, 05–06.12.2012)
  34. *Low-lying dipole response in Ca nuclei within the second RPA*, Nuclear Structure and Dynamics II (Croazia, 09–13.07.2012)
  35. *Thermodynamics of Finite-Systems with fixed Number of Particles*, Nuclear Structure and Related Topics (Dubna, Russia, 03–07.07.2012)
  36. *Low-lying dipole response within the Second RPA in Ca nuclei*, LEA-COLLIGA Meeting (Orsay, Francia, 14–16.11.2011)
  37. *Low-lying dipole response within the Second RPA in Ca nuclei*, Structure and Dynamics of nuclei far from stability (Catania, Italia, 15–16.09.2011)
  38. *Second Random Phase Approximation with Skyrme Interaction*, International Spring Seminar on Nuclear Physics (Vietri sul Mare, Italia, 21–25.05.2010)
  39. *Collective Excitations within the Second RPA*, Multidisciplinary Workshop on RPA (Paris, Francia, 26–29.01.2010) (invited)
  40. *Second RPA studies in metallic clusters*, XII Convegno su problemi di fisica nucleare teorica (Cortona, Italia, 2008)
  41. *Theoretical Physics use cases in the PI2S2 Project*, Grid Open Days (Palermo, Italia, 06–07.12.2007)

Catania, 5-10-2026

