

## Talks presented at international conferences and workshops

*Probing  $\alpha$ -like quartet condensation in  $N=Z$  nuclei by  $\alpha$ -transfer reactions*

N. Sandulescu

16<sup>th</sup> Varena Conference on Nuclear Reaction Mechanism (Varenna, Italy, 11-16/06/2023)

*Proton-neutron pairing and quartet correlations in  $N=Z$  nuclei*

N. Sandulescu

Frontiers in Nuclear Structure Theory (Stockholm, Sweden, 23-25/05/ 2022)

*Proton-neutron pairing and quartet correlations in ground/excited states of  $N=Z$  nuclei*

N. Sandulescu

European Nuclear Physics Conference (Santiago de Compostela, Spain, 22-28/10/2022)

*Proton-neutron pairing and  $\alpha$ -like quartet correlations in nuclei*

N. Sandulescu

Nuclear Structure and Dynamics (Venice, Italy, 13-17/05/2019)

*$\alpha$ -like quartet correlations and proton-neutron pairing in nuclei close to  $N=Z$  line*

N. Sandulescu

Fundamentals of Nuclear Particles Decays (Stockholm, Sweden, 28-30/08/2019)

*Fingerprints of  $\alpha$ -like quartet correlations in  $N=Z$  nuclei*

N. Sandulescu

Recent advances on pn pairing and quartet correlations in nuclei (II) (Saclay, France, 2-8/09/ 2019)

*Signatures of quartet condensation in  $N=Z$  nuclei*

N. Sandulescu

Quantum Phase Transitions in Nuclei and Many-body Systems ( Padovna, Italy, 22-25/05/2018 )

*Proton-neutron pairing and quartet correlations in nuclei*

N. Sandulescu

Recent advances on pn pairing and quartet correlations in nuclei (I) (Saclay, France, 10-13/09/ 2018)

*Proton-neutron pairing and quartet correlations in nuclei*

N. Sandulescu

Recent developments in microscopic theories for nuclear structure (Madrid, Spain, 29/11-01/12/2017)

*Pairing,  $\alpha$ -like quartetting and Yang criterion for identifying long range superfluid-type correlations*

N. Sandulescu

Advanced many-body and statistical methods in mesoscopic systems (Brasov, Romania, 4-8/09/2017)

*Proton-neutron pairing and  $\alpha$ -like quartet correlations in nuclei*

N. Sandulescu

Current Problems and Prospects for Nuclear Structure (Sant' Angelo d'Ischia, Italy, 15-19/05/2017)

*Proton-neutron pairing and quartetting in nuclei*

N. Sandulescu

XXII International School on Nuclear Physics and Applications (Varna, Bulgaria, 10 – 16/09/ 2017)

*Quartet correlations induced by pairing forces*

N. Sandulescu

Workshop on "NN and quartet correlations in nuclei" ( Yukawa Institute, Kyoto, Japan, 27 June 2016)

*Proton-neutron pairing and quartetting in nuclei*

N. Sandulescu

Proton-neutron pairing and quartet correlations in nuclei ( ECT\* Trento, Italy, 19-24/09/ 2016)

*Pairing and quartetting in nuclei*

N. Sandulescu

Nuclear Structure and Dynamics III ( Portoroz, Slovenia, 14-19/06/2015)

*Pairing and quartetting in nuclei*

N. Sandulescu

XXI International School on Nuclear Physics and Applications (Varna, Bulgaria, 07-0.11/09/2015 )

*Proton-neutron pairing and alpha-type quartet correlations: shell model versus mean field*

N. Sandulescu

Recent Advances in the Nuclear Shell Model ( GANIL-Caen,France, 19-20.06. 2014)

*Pairing and quarteting in proton-neutron systems*

N. Sandulescu

Computational Challenges in Nuclear and Many-Body Physics (NORDITA, Stockholm, 15.09-10.10/2014)

*Pairing and quartet condensation in proton-neutron systems*

N. Sandulescu

Advanced many-body and statistical methods in mesoscopic systems ( Brasov,Romania, 1-5.09,2014)

*Alpha-like quartet correlations and proton-neutron pairing in  $N=Z$  nuclei*

N. Sandulescu, D. Negrea, J. Dukelsky, C. W. Johnson

European Nuclear Physics Conference (Bucharest, Romania, 16-21/09/ 2012)

*Pairing and alpha-like quartet condensation in  $N=Z$  nuclei*

N. Sandulescu

International Conference “Nuclear Structure and Dynamics” (Opatija, Croatia, 9-13/07/ 2012)

*Pairing and quartet correlations in  $N=Z$  nuclei*

N. Sandulescu

Many-body correlations from dilute to dense nuclear systems (Inst. Henri Poincare, Paris, 15-18/02/ 2011)

*Pairing Correlations in Nuclei: How Accurate are the BCS-type Models ?*

N. Sandulescu

New Quests in Nuclear Structure ( Vietri sul Mare, Italy, 21-25/05/2010]

*Spatial correlations induced by pairing in atomic nuclei*

N. Sandulescu

Effective Field Theories and the Many-Body Problem ( INT- Seattle, USA, 23/03-05/06/ 2009)

*Thermodynamic properties of inner crust matter.*

N. Sandulescu

Defining the Neutron Stars Crust: X-ray Bursts, Superbursts and Giant Flares ( Santa Fe, 19-21/05/2009)

*Generic strong coupling behavior of Cooper pairs in the surface of superfluid nuclei*

N. Sandulescu

Nuclear Structure and Related Topics ( Dubna, Rusia, 29/06-04/07/ 2009)

*Two-body correlations induced by pairing*

N. Sandulescu

Probing pair-correlations: experimental tools and associated models ( Saclay, France, 13-15/10/ 2008)

*Properties of pairing correlations in weak, intermediate and strong coupling regimes*

N. Sandulescu

Theoretical issues in nuclear astrophysics ( IPN-Orsay, France, 31/03-04/04/2008)

*Nuclear Superfluidity and Cooling Time of Neutron Stars*

N. Sandulescu

The Neutron Star Crust and Surface ( INT-Seattle, USA, 18/06-19/07/ 2007)

*36. Nuclear Superfluidity and Cooling Time of Neutron Stars*

N. Sandulescu

Summer School “ Exotic Nuclei: New Chalanges “ ( Les Houches, France, 7-18/05/2007)

*Nuclear Superfluidity and Thermal Properties of Neutron Stars*

N. Sandulescu

Helmholtz International Summer School (Dubna, Rusia, 21/08-01/09/2007 )

*Nuclear Superfluidity and Thermal Properties of Neutron Stars*

N. Sandulescu

International Symposium on Exotic States of Nuclear Matter ( Catania, Italy, 11-15/06/ 2007 )

*Cooling Time of Neutron Stars in the HFB Approach*

N. Sandulescu

Theoretical issues in nuclear astrophysics (IPN-Orsay, France, 10-15/04/ 2006)

*Effective Nuclear Forces in a Quark-Meson Coupling Model*

N. Sandulescu

Workshop : Daniel Gogny Jubilee ( CEA- Bruyeres le Chatel, France, 05/2006)

*Nuclear Superfluidity in Exotic Nuclei and Neutron Stars*

N. Sandulescu

International Summer School: Collective Motion and Phase Transitions in Nuclear System ( Predeal, Romania, 28/08-09/09/2006)

*Screening effects on pairing in neutron matter*

N. Sandulescu

Recent Developments in Mean-Field Methods and in the Treatment of Pairing ( Saclay, France, 28/06 – 08/07/2005 )

*Nuclear superfluidity in the crust of neutron stars*

N. Sandulescu

International Summer School: Exotic Nuclei and Nuclear/Particle Astrophysics ( Mamaia, Romania, 13-24/06/2005)

*Shell model in complex energy plane*

N. Sandulescu

Workshop : “Shell Model” (CEA/ESNT-Saclay, France, 06/2005)

*Neutron stars crust: superfluid properties, collective excitations and specific heat*

N. Sandulescu

Workshop: Many-Body Physics of Neutron Stars (IPN-Orsay, France, 04/2005)

*Self-consistent continuum QRPA and collective excitations in dripline nuclei*

N. Sandulescu

Workshop: Collective excitations in mean field theories (CEA/ESNT- Saclay, France, 01/2005)

*Superfluid and thermal properties of the inner crust of neutron stars.*

N. Sandulescu

Workshop: "Theoretical Issues in Nuclear Astrophysics" ( IPN-Orsay,France, 03/2004)

*Antibound and resonant states in halo nuclei*

N. Sandulescu

Workshop: "Nuclear Response under Extreme Conditions", ( ECT\* Trento, Italy, 10/2003)

*Resonant Continuum and Pairing Correlations in Dripline Nuclei*

N. Sandulescu

International Summer School on Nuclear Physics (Istanbul, Turkey, 09/1998)

*The consequences of a microscopic equation of state on collective flow and multifragmentation*

N. Sandulescu

The XXXII Intern. Winter Meeting on Nuclear Physics ( Bormio, Italy, 02/1994)

*Microscopical QMSM Calculations in Sn and Pb Isotopes*

N. Sandulescu

The 4th Spring Seminar on Nuclear Physics ( Amalfi, Italy, 05/1992)