Dr. Onoufrios Sgouros, Assistant Professor

PERSONAL & CONTACT INFORMATION

Date and place of birth: 21/12/1989 in Corfu, Greece
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EDUCATION

Jun. 2013 - May 2017	PhD in Physics Physics Department, University of Ioannina, Greece PhD Thesis: *«Elastic scattering and reaction mechanisms for the system $^{7}Be+^{28}Si$ at near barrier energies»* *(https://www.didaktorika.gr/eadd/handle/10442/44384?locale=en)*
Nov. 2011 - Jul. 2013	Master Degree in Physics Physics Department, University of Ioannina, Greece MSc Thesis: *«Transfer reactions for the system ^{20}Ne + ^{28}Si at near barrier energies»*
Sep. 2007 - Jul. 2011	Bachelor's Degree in Physics Physics Department, University of Ioannina, Greece

CURRENT AND PREVIOUS POSITIONS

Jul. 2026 - present	Assistant Professor Physics Department, University of Ioannina, Greece
Jan. 2026 - Jul. 2026	Post-Doctoral Researcher under the ERC research programme NURE Department of Physics and Astronomy "Ettore Majorana", University of Catania, Italy and Laboratori Nazionali del Sud, Istituto Nazionale di Fisica Nucleare (INFN-LNS), Italy
Jan. 2023 – Jan. 2026	Post-Doctoral Researcher with a research grant under the ERC research programme NURE Department of Physics and Astronomy "Ettore Majorana", University of Catania, Italy and Laboratori Nazionali del Sud, Istituto Nazionale di Fisica Nucleare (INFN-LNS), Italy
Jan. 2021 – Jan. 2023	Post-Doctoral Fellow under INFN Fellowship Programme in Experimental Physics Laboratori Nazionali del Sud, Istituto Nazionale di Fisica Nucleare (INFN-LNS), Italy

Feb. 2018 - Dec. 2020	Researcher (Researcher III – Professional Level) under the ERC research programme NURE Laboratori Nazionali del Sud, Istituto Nazionale di Fisica Nucleare (INFN-LNS), Italy

FELLOWSHIPS AND AWARDS

Jan. 2021 – Jan. 2023	Post-Doctoral Fellowship by the National Institute of Nuclear Physics (INFN), Italy under the INFN Fellowship Programme in Experimental Physics
2021	Award / Special Mention from the Italian Physical Society (Società Italiana di Fisica) for the communication entitled: "Study of the single-nucleon transfer reactions in the ^{18}O+^{48}Ti collision at 275 MeV", presented in the 107th National Congress
Jun. 2017 – Sep. 2017	ERASMUS+ scholarship for Traineeship at INFN – Laboratori Nazionali del Sud (LNS) in Catania, Italy
Dec. 2011 – May 2013	Postgraduate scholarship by the National Scholarship Foundation (I.K.Y.), Greece, by funds of the Operation Program "Education and Lifelong Learning" of the European Social Fund and the National Strategic Reference Framework (NSRF)
Mar. 2013 – May 2013	ERASMUS placement scholarship for Practical Training at INFN – Laboratori Nazionali del Sud (LNS) in Catania, Italy
2009 and 2010	Undergraduate scholarships for the exceptional performance during my studies by the National Scholarship Foundation (I.K.Y.), Greece

SUPERVISION OF GRADUATE STUDENTS

2023 – 2024	Co-supervisor (correlatore) of a Master's student (Ms. Caterina Garofalo), University of Catania, Italy, with a thesis entitled "*Study of the ^{48}Ti(^{18}O,^{18}Ne)^{48}Ca double charge exchange reaction at 15 MeV/u for the NUMEN project*"
2019 – 2021	Co-supervisor (correlatore) of a Master's student (Mr. Mauro Cutuli), University of Catania, Italy, with a thesis entitled "*Study of the ^{48}Ti(^{18}O,^{17}O)^{49}Ti one neutron transfer reaction at 275* MeV *in the context of the NUMEN project*"

REFEREE ACTIVITY

I serve as a reviewer for *Physical Review C*, *European Physical Journal A*, *Nuclear Physics B*, *Universe*, *Physics*, *Energies*, *Indian Journal of Physics*, *Instruments*, *EPJ Web of Conferences* and *Acta Physica Polonica B*

RESEARCH INTERESTS

Nuclear Reactions, Nuclear reactions with radioactive beams, Heavy-ion induced transfer reactions, Nuclear reactions for neutrinoless double beta decay, Neutron Physics

PARTICIPATION IN EXPERIMENTS

2025 – 2026	Spokesperson of 3 experiments accepted by International Programme Advisory Committees (IJCLAB ALTO PAC, France)
2019	Co-spokesperson of an experiment accepted by the International Programme Advisory Committee (PAC) of INFN-LNS, Italy
2010 – present	Participation in 37 Nuclear Physics experiments approved by International Scientific Committees at international facilities (INFN-LNS/Italy, INFN-LNL/Italy, IJCLab/France, GANIL/France, HIL/Poland, NPL São Paulo/Brazil, iThemba/South Africa and NSL Notre Dame/U.S.A.)

MAJOR COLLABORATIONS AND PROJECTS

- TREFLE experiment: A research plan developed in collaboration with the NUMEN group at INFN-LNS in Catania. The TREFLE (**T**ransfer **RE**actions **F**or neutrinoless doub**LE** beta decay) experiment aims, for the first time, to provide new constraints on the calculations of the nuclear matrix elements relevant to neutrinoless double beta decay through the study of heavy-ion induced transfer reactions. The pilot experiment received financial support from EURO-LABS and INFN. Role: Spokesperson.

- NUMEN project (Spokespersons: Prof. F. Cappuzzello, Dr. C. Agodi): Contribution to the following sub-projects: Cross section data, Data Reduction, Focal Plane Detector Gas Tracker, Focal Plane Detector Particle IDentification (FPD PID) system, Gamma Array, Information Technology (IT) system. Role: Main team member.

- Researcher under the project NURE (P.I.: Dr. M. Cavallaro) with tasks: “Preparation, data-taking, data-analysis of the experiments with accelerated ions and MAGNEX”. The project was funded by the European Research Council (1.3M€) under Grant Agreement No. 714625. Role: Main team member.

SCIENTIFIC PUBLICATIONS

- 68 publications in *peer-reviewed* Scientific Journals
- 95 publications in *peer-reviewed* Conference Proceedings
- 16 publications in Conference Proceedings without *peer-review*
- 58 publications in Activity Reports

ORAL AND POSTER PRESENTATIONS

- 11 Oral Presentations on International Conferences/Workshops/Schools
- 6 Oral Presentations on National Conferences/Workshops/Symposia
- 2 Poster Presentations

BIBLIOMETRIC INFORMATION

- SCOPUS h – index: 30
- SCOPUS citations: more than 2060
- SCHOLAR h – index: 32, SCHOLAR h – index since 2021: 27
- SCHOLAR i10 – index: 60, SCHOLAR i10 – index since 2021: 52
- SCHOLAR citations: more than 2620, SCHOLAR citations since 2021: more than 2000

SELECTED PUBLICATIONS (in reverse chronological order)

- **Probing nuclear interactions à la Rutherford: insights on ^{4}He from α scattering**
  F. Cappuzzello, V. Soukeras, S. Bacca, D. Carbone, M. Cavallaro, L.C. Chamon, I. Lombardo, G. Orlandini, M. Viviani, C. Agodi, H.-W. Becker, G.A. Brischetto, S. Calabrese, C. Ciampi, M. Cicerchia, M. Cinausero, I. Ciraldo, D. Dell´Aquila, M. Fisichella, C. Frosin, A. Hacisalihoglu, M. Hilcker, A. Kievsky, Y. Kucuk, T. Marchi, **O. Sgouros**, A. Spatafora, D. Torresi, M. Vigilante, A. Yildirim; **Nature Communications 17** (2026) 8003.

- **^{18}O+^{48}Ti elastic and inelastic scattering at 275 MeV**
  G.A. Brischetto, **O. Sgouros**, D. Carbone, F. Cappuzzello, M. Cavallaro, J. Lubian, G. De Gregorio, C. Agodi, D. Calvo, E.R. Chávez Lomeli, I. Ciraldo, F. Delaunay, H. Djapo, C. Eke, P. Finocchiaro, M. Fisichella, A. Gargano, M.A. Guazzelli, A. Hacisalihoglu, R. Linares, N.H. Medina, M. Moralles, J.R.B. Oliveira, A. Pakou, L. Pandola, V. Soukeras, G. Souliotis, A. Spatafora, D. Torresi, A. Yildirim, V.A.B. Zagatto; **Physical Review C 109** (2024) 014604.

- **Shedding light on nuclear aspects of neutrinoless double beta decay by heavy-ion double charge exchange reactions**
  F. Cappuzzello, H. Lenske, M. Cavallaro, C. Agodi, N. Auerbach, J.I. Bellone, R. Bijker, S. Burrello, S. Calabrese, D. Carbone, M. Colonna, G. De Gregorio, J.L. Ferreira, D. Gambacurta, H. Garcia-Tecocoatzi, A. Gargano, J.A. Lay, R. Linares, J. Lubian, E. Santopinto, **O. Sgouros**, V. Soukeras, A. Spatafora; **Progress in Particle and Nuclear Physics 128** (2023) 103999.

- **One-neutron transfer reaction in the ^{18}O+^{48}Ti collision at 275 MeV**
  O. Sgouros, M. Cutuli, F. Cappuzzello, M. Cavallaro, D. Carbone, C. Agodi, G. De Gregorio, A. Gargano, R. Linares, G. A. Brischetto, D. Calvo, E.R. Chávez Lomeli, I. Ciraldo, F. Delaunay, H. Djapo, C. Eke, P. Finocchiaro, M. Fisichella, M.A. Guazzelli, A. Hacisalihoglu, J. Lubian, N.H. Medina, M. Moralles, J.R.B. Oliveira, A. Pakou, L. Pandola, V. Soukeras, G. Souliotis, A. Spatafora, D. Torresi, A. Yildirim, V.A.B. Zagatto; **Physical Review C 108** (2023) 044611.

- **One-proton transfer reaction for the ^{18}O+^{48}Ti system at 275 MeV**
  O. Sgouros, M. Cavallaro, F. Cappuzzello, D. Carbone, C. Agodi, A. Gargano, G. De Gregorio, C. Altana, G. A. Brischetto, S. Burrello, S. Calabrese, D. Calvo, V. Capirossi, E.R. Chávez Lomeli, I. Ciraldo, M. Cutuli, F. Delaunay, H. Djapo, C. Eke, P. Finocchiaro, M. Fisichella, A. Foti, A. Hacisalihoglu, F. Iazzi, L. La Fauci, R. Linares, J. Lubian, N.H. Medina, M. Moralles, J.R.B. Oliveira, A. Pakou, L. Pandola, F. Pinna, G. Russo, M.A. Guazzelli, V. Soukeras, G. Souliotis, A. Spatafora, D. Torresi, A. Yildirim, V.A.B. Zagatto; **Physical Review C 104** (2021) 034617.

- **An upgraded focal plane detector for the MAGNEX spectrometer**
  D. Torresi, **O. Sgouros**, V. Soukeras, M. Cavallaro, F. Cappuzzello, D. Carbone, C. Agodi, G.A. Brischetto, S. Calabrese, I. Ciraldo, N. Deshmukh, A. Hacisalihoglu, L. La Fauci, A. Spatafora; **Nuclear Inst. and Methods in Physics Research A 989** (2021) 164918.

- **Multip: A Multi Purpose simulation Monte Carlo algorithm for two- and three-body reaction kinematics**
  O. Sgouros, V. Soukeras and A. Pakou, **European Physical Journal A 53** (2017) 165.

- **Elastic scattering of ^{7}Be + ^{28}Si at near-barrier energies**
  O. Sgouros, A. Pakou, D. Pierroutsakou, M. Mazzocco, L. Acosta, X. Aslanoglou, Ch. Betsou, A. Boiano, C. Boiano, D. Carbone, M. Cavallaro, J. Grebosz, N. Keeley, M. La Commara, C. Manea, G. Marquinez-Duran, I. Martel, N. G. Nicolis, C. Parascandolo, K. Rusek, A. M. Sánchez-Benítez, C. Signorini, F. Soramel, V. Soukeras, C. Stefanini, E. Stiliaris, E. Strano, I. Strojek and D. Torresi; **Physical Review C 95** (2017) 054609.

- **α and ^{3}He production in the ^{7}Be + ^{28}Si reaction at near-barrier energies: Direct versus compound-nucleus mechanisms**
  O. Sgouros, A. Pakou, D. Pierroutsakou, M. Mazzocco, L. Acosta, X. Aslanoglou, Ch. Betsou, A. Boiano, C. Boiano, D. Carbone, M. Cavallaro, J. Grebosz, N. Keeley, M. La Commara, C. Manea, G. Marquinez-Duran, I. Martel, N. G. Nicolis, C. Parascandolo, K. Rusek, A. M. Sánchez-Benítez, C. Signorini, F. Soramel, V. Soukeras, C. Stefanini, E. Stiliaris, E. Strano, I. Strojek and D. Torresi; **Physical Review C 94** (2016) 044623.