Personal Information

Name	**Hasan Maridi**
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Links	Researchgate | Orcid | LinkedIn | Personal Website

Highlights

- A research experience for 9 years in theoretical models of the nuclear reactions.
- A proved record of 20 publications in recognized international peer-reviewed journals.
- Communication skills with active collaborations, invited talks, & international-conference presentations.
- An extensive experience in teaching and tutoring in 13 Universities in four countries.
- Supervision and refereeing of Mphy and graduated projects in several universities.

Education

2010-2014	**Ph.D. in Theoretical Physics** (Thesis),	*Cairo University, Egypt*
2006-2009	**Master (M.Sc.) in Theoretical Physics** (Thesis), with Distinction	*Cairo University, Egypt*
2000-2004	**Bachelor (B.Sc.) in Physics,** Distinction with First Class Honors.	*Cairo University, Egypt*

Work Experience

2023-Now	**Research Fellow**, Dep. of Physics & Astronomy,	*University of Manchester, UK*
2020-2022	**Research Fellow**, Heavy ion Laboratory,	*University of Warsaw, Poland*
2018-2020	**Visiting Assistant Professor**,	*Philadelphia University, Jordan*
2015-2018	**Assistant Professor**, Dep. of Physics,	*Taiz University, Yemen*
2015-2017	**Assistant Professor**, Faculty of Engineering,	*Taiz University, Yemen*
2010-2015	**Lecturer**, Dep. of Physics,	*Taiz University, Yemen*
2005-2009	**Lab. Technician**, *National Atomic Energy Commission*,	*NATEK, Sana'a, Yemen*

Personal Skills

Languages	English | Arabic (native).
Computer	ICDL | Windows | Linux | Microsoft Office™ | LaTeX | Mathematica | FORTRAN | OriginLab | Python | C++.

Research Experience

Skills	Calculations | programming | analyzing | writing | publishing | refereeing | collaborating.
Interests	Reactions of exotic nuclei | Coulomb Breakup | Optical & Polarization Potentials
Funding	Ulam Programme (NAWA, Poland, 2020-2022) | The British Academy Grant (2023-2025).
Active Collaboration	Univ. of Warsaw (2020-now, 6 published papers, 1 in progress) | Univ. of Manchester (2023-now, 2 papers in progress) | Univ. of Seville (2024-now, 1 paper in progress)
Publications	25 Publications | 15 Papers | 6 Proceedings | 3 Reports | 1 Book | Full list on last page

Talks, Workshops, and Conferences

Summary: 9 Invited talks | 1 Poster | 4 Oral talks at Conferences |

A- Invited Talks

- "A two-cluster approach for weakly-bound and halo nuclei", *University of Seville*, Spain — Nov 2024
- "Coulomb Breakup of Weakly-Bound and Halo Nuclei", *University of York*, UK — Oct 2024
- "Simultaneous calculations for the d+^{197}Au", Heavy Ion Laboratory, *Univ. of Warsaw*, Poland — Oct 2024
- "Elastic scattering and breakup reactions of Halo Nuclei", *University of Edinburgh*, UK — Oct 2024
- "Coulomb breakup of light exotic nuclei", *University of Manchester*, UK — May 2024
- "Nuclear reactions of halo nuclei", *Najran University*, SA (Remotely). — May 2024

- "Simultaneous calculations for elastic scattering, fusion, and direct cross sections", Heavy Ion Laboratory, *University of Warsaw*, Poland — Jan 2024
- "Coulomb dynamical polarization potentials of exotic nuclei", *University of Surrey*, UK — Nov 2023
- "Coulomb breakup of exotic nuclei ", for Heavy Ion Laboratory, *University of Warsaw*, Poland — May 2022
- "Proton elastic scattering: optical model & eikonal approximation", Faculty of Physics, *University of Warsaw*, Poland — Mar 2021

B- Oral Presentations in conferences

- "Simultaneous Calculation of Elastic Scattering, Transfer, and Breakup Cross Sections for d+^{197}Au Reaction", Nucleus-Nucleus Collisions Conference (NN2024), *Whistler*, BC, Canada — Aug 2024
- "Coulomb dissociation of exotic nuclei using Coulomb dynamical polarization potential", the Direct Reactions with Exotic Beams conf. (DREB2022), *Santiago de Compostela*, Spain — Jun 2022
- "Data normalization of p+^{9}Be elastic scattering: statistical study", Information & Statistics in Nuclear Experiment and Theory (ISNET 8) conf., *FRIB, Michigan State Univ.*, USA (online) — Dec 2021
- "Energy dependence of optical potential" Nucleus-2019 conference", *Dubna*, Russia — July 2019

C- Posters in conferences

- "Simultaneous calculation of elastic scattering & direct cross sections for exotic projectiles", the Direct Reactions with Exotic Beams (DREB2024) conference, *Wiesbaden*, Germany — Jun 2024

D- Conferences (Attending Remotely):

- SIMFP2018, Saudi Arabia, Feb-Mar 2018
- NSRT 2015, *Dubna*, Russia, July 2015
- SIMFP2016, Saudi Arabia, Feb 2016
- INPC13, *Firenze*, Italy, June 2013.

E- Other workshops and conferences (just attending)

- Nuclear Early Career Research Forum, *Institute of Physics*, London, UK — Oct 2023
- NSAC Long-Range Plan Town Hall Meeting, *Argonne National Lab.*, USA (online) — Nov 2022
- Low energy community meeting (LECM2022), *Argonne National Lab.*, USA (online) — Aug 2022
- Low energy community meeting (LECM2021), USA (online) — Aug 2021
- International Meeting on Energy Security in the Middle East, *Amman*, Jordan — Jun 2019
- The 6th MEDENER International Conference on Energy Transition, *Amman*, Jordan — Oct 2018
- "Reform of Graduate Studies in Nuclear Sciences", *Cairo University*, Egypt — Mar 2009

Teaching Experience

Summary: 5 years as assistant professor | 2 years as tutor | 13 Universities | 4 Countries

2023-Now	**Rule**	**Academic tutor,** Dep. of Physics & Astronomy, *University of Manchester*, UK
	Courses	Electromagnetism, Mathematics of Waves & Fields, Quantum Mechanics, Statistical Mechanics, Solid-State Physics, Optics
	duties	Tutoring, supervision of Mphys projects
2018-2020	**Rule**	**Assistant Professor,** Dep. of Alternative Energy Tech., *Philadelphia University*, Jordan
	Courses	Energy Conversion, Environmental Impacts of Energy
	duties	Teaching, quality assurance management, organizing workshops, supervising and evaluating graduation projects
2015-2018	**Rule**	**Assistant Professor,** Dep. of Physics, Faculty of Science, *Taiz University*, Yemen.
	Courses	Quantum Mechanics, General Physics
	duties	Teaching, preparing program plans, writing course descriptions
2015-2017	**Rule**	**Assistant Professor,** Fac. of Engineering and Fac. in Bajil, *Hodeidah Univ.*, Yemen.
	Courses	General Physics I & II, Fluid Mechanics, Physical Chemistry
	duties	Teaching, organizing workshops
2016-2018	**Rule**	**Assistant Professor,** *Al-Nasser Univ.*, *Al-Razi Univ.*, *Univ. of Sci. & Tech.*, *Univ. Of Modern Sciences*, *British Univ. in Yemen, The Civilization Univ., Yemen Univ., Arabian Univ. of Sci. and Tech.*

	Courses	General Physics I & II, Engineering Physics, Medical Physics, Thermodynamics, Research Methods, Statistics
	duties	Teaching, organizing workshops, Lab mentoring, writing course plans
2010-2015	**Rule**	**Lecturer,** Dep. of Physics, Faculty of Applied Science, *Taiz University*, Yemen.
	duties	Teaching, laboratory technician

Leadership and Service

- **Department rapporteur**, Alternative Energy Tech. Dep., *Philadelphia University*, Jordan — 2019-2020
- **Manager** of Quality Assurance, Alternative Energy Tech. Dep., *Philadelphia Univ.*, Jordan — 2018-2020
- **Organizer** of Workshops in several Universities in Jordan and Yemen — 2017-2020

Organization of Scientific Workshops and Meetings

- **Lead Organizer**, Situation and Future of Energy in Jordan, *Philadelphia University*, Jordan — Jan 2020
- **Sole Organizer**, Environmental Impacts of Energy, *Philadelphia University*, Jordan — Apr 2019
- **Co-organizer**, "Using LATEX for writing the sci. publications", *Philadelphia Univ.*, Jordan — Feb 2019
- **Sole Organizer**, Energy Resources, Descriptive Studies, *Philadelphia University*, Jordan — Dec 2018
- **Lead Organizer**, Applications of Physics in Engineering, *British University*, Yemen — Feb 2018
- **Sole Organizer**, Applications of Physics in Medical Sciences, *Al-Nasser University*, Yemen — Dec 2017
- **Sole Organizer**, Applications of Nuclear and Solar Energy, *Hodeida University*, Yemen — Apr 2017
- **Lead Organizer**, Physics Applications in Architecture, *Univ. of Sci. & Tech. Hod*, Yemen — Jan 2017

Commissions of Trust and Committees

- **Member** in committee (4 Academics) to establish a department "Science of Renewable Energy" in *Taiz University* — Apr-Aug 2020
- **Member** in committee of reviewing the graduated projects, *Philadelphia University*, Jordan — Jun 2019

Awards, Grants and Honors

- The British Academy/Cara/Leverhulme Researchers at Risk Research Support Grant, **£8.6k** — 2023
- Council for At-Risk Academics (Cara) Fellowship, at *University of Manchester*, UK, **£90k** — 2023
- TWAS Young Affiliateship of IsDB-TWAS Scientists Programme — 2021
- NAWA Scholarship Grant, Heavy ion Laboratory, *University of Warsaw*, *Poland*, **100,000PLN** — 2020
- IIE-SRF Fellowship Award (*The Institute of International Education-Scholar Rescue Fund*), **$50k** — 2018
- Best Master Thesis Award in Faculty of Science, *Cairo University*, **2000EGP** — 2009
- Distinction with First Class Honors for Preliminary Courses of Master, **1000EGP** — 2007
- Financial Support of Yemeni Ministry of Higher Education for MSc & PhD, **£11.1k, $48k** — 2006
- Faculty of Science Award for the best bachelor students in the faculty, *Cairo University* — 2004
- Prof. Mahmoud Mokhtar Medal for Best Student in the Physics Department, *Cairo University* — 2004
- Schlumberger Limited Company Award for Best Students, *Cairo University*, **$100** — 2003
- Scholarship from the Egyptian Ministry of Higher Education, **£4000** — 2000

Professional Development and Training

- "Calculations of breakup & polarization potentials", *University of Seville*, Spain, 1 week — Oct 2024
- "Transfer-reaction calculations using Fresco II", *University of Warsaw*, Poland, 2 weeks — Oct 2024
- TRIUMF Summer Institute 2024: "Modern Tools for Nuclear Reactions", TRIUMF, Vancouver (Canada), one week training. — Aug 2024
- FSE Foundations of Teaching and Learning (FOTL): *University of Manchester*, UK. Topics: The Effective Project Supervisor; Managing Student; Practical Sessions; Assessment, Marking & Feedback; Teaching Design & Delivery; Support Class Teaching, 12 hours — Nov 2023 - Jun 2024
- "Transfer-reaction calculations using Fresco I", *University of Warsaw*, Poland, 2 weeks — Jan-Feb 2024
- Teaching Skills (FT1901): Academic Training Center, *Philadelphia Univ.*, Jordan. Topics: Effective lesson planning, Virtual education, Blended learning, 21 hours — Feb 2019

- Nuclear Reactor Physics Basics, *MEPhI University* & *Coursera* (online), 16 hours — Dec 2018
- Teaching Skills (FT1801): Academic Training Center, *Philadelphia Univ.*, Jordan. Topics: Building websites, Effective learning, Google Forms & Drive systems), 18 hors — Sep 2018
- ICDL, Center for Foreign Languages and Translation, *Cairo University*, Egypt. — Feb-Mar 2013
- NSPA Workshop on Radiation Protection, *Cairo University*, Egypt, 72 hours. — Jan-Feb 2012
- "Medical Physics and Radiation Protection", *Cairo University*, Egypt — Jan 2011

Science Outreach Activities

- **Moderator** of "Yemen's wind harvesting potentials" webinar, 05 Jun 2021. — Jun 2021
- **Speaker** in "Attacks on Higher Education webinar", by IIE-SRF & GCPEA, 27 Jan 2021. — Jan 2021
- **Moderator** of "Status and Prospect of Solar Energy in Yemen" webinar, 28 Nov 2020. — Nov 2020
- **Co-founder** of the Association of Yemeni Academics and Professionals (AYAP) abroad. — Aug 2020
- **Speaker** in Science in Exile webinars: "Protracted situation of displacement" , 28 July 2020. — Jul 2020
- **Speaker** in "NAWA event "The Science must go on! Despite the COVID-19", April 2020 — Apr 2020

Press Coverage & Media

- Warsaw University Magazine: "Z czego rodzi się szczęście?", by Anna Stobiecka, Pismo uczelni UW 102, 30 (2022). — Apr 2022
- Nature: "How three refugee scientists kept their research hopes alive", by Virginia Gewin, *Nature* 598, 527 (2021). — Oct 2021
- Research in Poland: "Hasan Maridi-from Yemen to Poland. A story of a displaced scientist" — Dec 2021
- On the brochure cover of the 100-year anniversary of the Institute of International Education. — Jul 2020
- The IIE-SRF's newsletter (The Beacon), May 2020 issue. — May 2020

Memberships

- The Institute of Physics (IOP) Membership — 2024-2025
- British Educational Research Association (BERA) Membership — 2023-2025
- TWAS Young Affiliateship of IsDB-TWAS Scientists programme — 2021-2025
- FRIB Theory Alliance (MSU, USA) Membership — 2020-open

References

Available upon request.

Publications

Summary: 25 Publications | 15 Papers | 6 Conference Papers | 3 Reports | 1 Book

Papers

1. **H.M. Maridi**, J. Singh, N.R. Walet, D.K. Sharp, "*A two-cluster approach to the properties of one- and two-neutron-halo nuclei*", arXiv: 2407.03044 **(2024),** submitted to Phys. Rev. C.
2. **H.M. Maridi**, N. Keeley, K. Rusek, "*Simultaneous calculation of elastic scattering, fusion, and direct cross sections for reactions of weakly bound projectiles*", Phys. Rev. C 109, 034601 **(2024).**
3. **H.M. Maridi**, K. Rusek, N. Keeley, "*Calculation of Coulomb breakup cross sections using a new Coulomb dynamical polarization potential*", Phys. Rev. C 106, 054613 **(2022).**
4. A. T. Rudchik**,…, H.M. Maridi,**…, "*Comparison of* ^{10}B +^{6}Li *and* ^{10}B +^{7}Li *elastic scattering: The role of ground state reorientation and breakup*", Phys. Rev. C 106, 014615 **(2022).**
5. **H.M. Maridi**, K. Rusek, N. Keeley, "*Comparison of Coulomb breakup effects on the elastic scattering of* ^{6}He *and* ^{8}He *using a Coulomb dipole polarization potential*", Eur. Phys. J. A 58, 49 **(2022).**
6. **H.M. Maridi,** K. Rusek, N. Keeley, "*Coulomb dynamical polarization potential and the electric dipole polarizability for weakly-bound and neutron rich light nuclei*", Phys. Rev. C 104, 024614 **(2021).**
7. **H.M. Maridi,** A. Pakou, K. Rusek, "*The p+*^{9}Be *elastic scattering below* 30 MeV*: optical model analysis and data normalization"*, Int. J. Mod. Phys. E 30, 2150024 **(2021).**

8. A. T. Rudchik**,…, H.M. Maridi,**…, "^{6}Li+^{15}N *interaction at* $E_{c.m.}$ = 23.1 MeV*; validation of the* α + *d cluster model of* ^{6}Li", Phys. Rev. C 103, 044614 **(2021).**
9. **H.M. Maridi**, "*Energy dependence and surface contribution of the optical potential for nucleon-nucleus scattering at energies up to* 1 GeV*"*, Phys. Rev. C 100, 014613 (**2019**).
10. M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, "*Analysis of proton-*^{9,10,11,12}*Be scattering using an energy-, density-, and isospin-dependent microscopic optical potential*", Phys. Rev. C 90, 034615 (**2014**).
11. M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, "*Energy-dependent microscopic optical potential for scattering of nucleons on light nuclei*", Eur. Phys. J. A 50, 106 (**2014**).
12. M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, "*Elastic interaction of protons with stable and exotic light nuclei*", Phys. Rev. C 88, 064602 (**2013**).
13. M.Y.H. Farag, E.H. Esmael, **H.M. Maridi,** "*Elastic Microscopic study on proton elastic scattering of light exotic nuclei at energies below than* 100 MeV/nucleon", Eur. Phys. J. A 48, 154 (**2012**).
14. M.Y.M. Hassan, M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, "*Elastic scattering and breakup effect analysis of* ^{11}Be+^{12}C *at* 38.4 MeV/nucleon", Phys. Rev. C 79, 064608 (**2009**).
15. M.Y.M. Hassan, M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, **"***Microscopic model analysis of* ^{11}Li + *p elastic scattering at* 62, 68.4, *and* 75 MeV/nucleon", Phys. Rev. C 79, 014612 **(2009).**

Proceedings (Papers from Conferences)

1. **H.M. Maridi**, D.K. Sharp, J. Lubian, "*Simultaneous calculation of elastic scattering, transfer, breakup, and other direct cross sections for d+*^{197}Au *reaction*", in progress, Nucl. Phys. A **(2024)**.
2. **H.M. Maridi**, "*Energy dependence and surface contribution of the nucleon-nucleus optical potential"*, Bull. Russ. Acad. Sci. Phys. 84, 473 (**2020**).
3. **H.M. Maridi**, "*Proton scattering of helium isotopes using an energy-dependent folded potential"*, AIP Conf. Proc. 1976, 020004 **(2018)**.
4. **H.M. Maridi**, M.Y.H. Farag, E.H. Esmael, "*Energy-dependent microscopic optical potential for p+*^{9}*Be elastic scattering"*, AIP Conf. Proc. 1742, 030011 (**2016**).
5. **H.M. Maridi**, M.Y.H. Farag, E.H. Esmael, "*Analysis of proton scattering of stable and exotic light nuclei using an energy-dependent microscopic optical potential*", Eur. Phys. J. WoC 107, 08007 (**2016**).
6. M.Y.H. Farag, E.H. Esmael, **H.M. Maridi**, "*Microscopic study on proton elastic scattering of helium and lithium isotopes at energy range up to* 160 MeV/nucleon", Eur. Phys. J. WoC 66, 03025 (**2014**).

Reports

1. **H.M. Maridi**, K. Rusek, and N. Keeley, "*Comparison of Coulomb breakup effects on the elastic scattering of* ^{6}He *and* ^{8}He", HIL Annual Report 2021, 80 (**2022**).
2. A. T. Rudchik**,…, H.M. Maridi,**…, "*Coupling of* ^{6}Li+^{10}B *elastic scattering with the inelastic channels*", HIL Annual Report 2021, 60 (**2022**).
3. **H.M. Maridi**, K. Rusek, and N. Keeley, "*Coulomb dipole polarization potential for* ^{6}He+^{208}Pb", HIL Annual Report 2020, 49 (**2021**).

Books

H. M. Maridi, "*Scattering of halo nuclei"*, LAP Lambert Academic Publishing, **2013**. ISBN:9783659421112