

Curriculum Vitae – Anna Lisa Varri

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Positions

University of Edinburgh, Scotland, UK

08/2023 – *present* Reader (Associate Professor) — School of Mathematics and School of Physics and Astronomy
05/2021 – 07/2023 Lecturer (Assistant Professor)
05/2019 – *present* UKRI Future Leaders Fellow (FLF; Phase 1: 2019 – 23, Phase 2: 2023 – 26)
10/2015 – 10/2018 Marie Skłodowska-Curie Fellow, then Research Associate — School of Physics and Astronomy (SoPA)
09/2012 – 09/2015 Royal Commission for the Exhibition of 1851 Fellow — School of Mathematics (SoM)

Visiting research appointments

11/2018 – 11/2019 JSPS - Royal Society Fellow — Dept. of Astronomy, University of Tokyo, JP
08/2012 – 08/2013 The Gruber Foundation - IAU Fellow — Dept. of Astronomy, Indiana University Bloomington, IN, USA
09/2010 – 07/2011 Fulbright Visiting Graduate Student Researcher — Dept. of Physics, Drexel University, PA, USA

Education

Università degli Studi di Milano, IT — Dept. of Physics

01/2009 – 07/2012 Ph.D. in Theoretical Astrophysics, Jan. 2013 — Thesis: “Dynamics of globular clusters”
10/2005 – 04/2008 Master’s degree in Theoretical Physics, with highest honours (110/110 *cum laude*)
09/2002 – 09/2005 Bachelor’s degree in Physics, with highest honours (110/110 *cum laude*)

Fellowships and awards

2022 Future Leaders Fellowship (Phase 2), UK Research and Innovation (UKRI)
2019 Caroline Herschel Prize Lectureship, William Herschel Society & Royal Astronomical Society [lecture] [citation]
Future Leaders Fellowship (Phase 1), UKRI - *One of the twelve inaugural case studies* [video] [GOV.UK press]
2018 Research Fellowship, Japan Society for the Promotion of Science (JSPS) and Royal Society [feature] [JP press]
2015 Marie Skłodowska-Curie Individual Fellowship, European Commission [EU CORDIS press]
2012 Research Fellowship, Royal Commission for the Exhibition of 1851
The Gruber Foundation Young Scientist Award, International Astronomical Union [citation]
2011 Research Fellowship for Theoretical and Particle Physics, Angelo Della Riccia Foundation
International Award for faculty and doctoral candidates, Drexel University
2010 “All Disciplines” Research Fellowship, US-Italy Fulbright Commission
2008 “Open Topic” National Doctoral Fellowship, Italian Ministry of Education

Invited research visits and programmes

2024 KITP Program: “Interconnections between Physics of Plasmas and Self-gravitating Systems” Santa Barbara, USA
2020 KITP Program: “Globular Clusters at the Nexus of Star and Galaxy Formation” (online) Santa Barbara, USA
2018 Institut d’Astrophysique de Paris (Lagrange Visitor, Aug.) Paris, FR
Johns Hopkins University, Dept. of Physics & Astronomy (TIPAC Visitor, Mar.) Baltimore, USA
2017 Institute for Advanced Study, School of Natural Sciences (Astrophysics Visitor, Dec.) Princeton, USA
2015 Max Planck Institute fuer Astronomie (SFB Visitor, Aug.) Heidelberg, DE
2014 Kavli Summer Program in Astrophysics (KSPA, formerly ISIMA): “Gravitational Dynamics” CITA, Toronto, CA
2012 Cambridge University, Institute of Astronomy (IoA Visitor, Aug.) Cambridge, UK
2009 KITP Program: “Formation and Evolution of Globular Clusters” (Junior Member, Jan.) Santa Barbara, USA

Funding history

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|-------------|------|--|---------------|
| 2023 – 2026 | PI | Future Leaders Fellowship Grant, Phase 2 (MR/X011097/1, FEC), UKRI | 719,520 GBP |
| 2019 – 2023 | PI | Future Leaders Fellowship Grant, Phase 1 (MR/S018859/1, FEC), UKRI | 810,735 GBP |
| 2020 – 2024 | Co-I | Project de Recherche Collaborative: SEGAL, ANR (PI: C. Pichon) | 627,000 EUR |
| 2018 – 2020 | PI | Research Grant-in-Aid, JSPS (KAKENHI-18F18787, relinquished) | 1,800,000 JPY |
| 2018 – 2020 | PI | International Standard Fellowship Grant, JSPS (relinquished) | 8,888,000 JPY |
| 2017 – 2018 | Co-I | International Team Grant, ISSI Bern (PIs: V. Hénault-Brunet, M. Gieles) | ~20,000 CHF |
| 2016 – 2019 | Co-I | Research Project Grant, Leverhulme Trust (RPG-2015-408; PI: D. C. Hoggie) | 174,630 GBP |
| 2016 – 2017 | PI | Research Incentive Grant, Carnegie Trust for the Universities of Scotland | 6,768 GBP |
| 2015 – 2017 | PI | Marie Skłodowska-Curie Action (NESSY, MSCA-IF-EF-RI-658088), EU H2020 | 183,455 EUR |
| 2015 | Co-I | Visitors to Scotland Grant, Royal Society of Edinburgh (PI: D. C. Hoggie) | 900 GBP |
| 2012 – 2015 | PI | Research Fellowship Grant, 1851 Royal Commission (2012–13 <i>in absentia</i>) | 102,000 GBP |
| 2012 – 2013 | PI | IAU Research Fellowship Grant, The Gruber Foundation | 50,000 USD |
| 2012 | PI | Research Grant, Angelo Della Riccia Foundation | 3,600 EUR |
| 2011 | PI | International travel grants, Drexel University | 1,000 USD |
| 2010 – 2011 | PI | Fellowship and Travel Grant, US-Italy Fulbright Commission | 11,500 USD |

Selected professional activities

Co-organiser, invited SOC member for KITP program (kinetics24), large intl. conferences (e.g., IAUS 398 Seoul 2025; Sexten 2025; MODEST-24), and technical workshops (SEGAL 2023; Chaos 2023; Gaia Challenge WG 2016, all in Edinburgh).

Speaker - 48 invited seminars (2024: Leiden, Cardiff, Hebrew Uni, UCL/Applied Maths); 42 conference presentations (23 upon invitation, e.g. Sexten 2023, Aspen 2022, IASBS 2020, IAUS 351 Bologna 2019, STSci Precision Astrometry 2018).

Participant upon nomination - Interdisciplinary research fora (with nominating bodies): FLI Inaugural Conference 2020, as keynote (UKRI & UK Gov), UK-Japan Frontiers of Science 2019 (Royal Society & JSPS), European Research Night (EU-RAXESS Japan & JSPS), Nobel Prize Dialogue 2019 (JSPS).

External service - eCSE EPCC Panel (2024 –), Uni. Vienna faculty recruitment (2024), UKRI Interdisciplinary Assessment Panel (2023 – 25), STFC DiRAC Resource Allocation Committee, Astronomy and Cosmology Sub-Panel (2023 – 25), Royal Society International Exchanges Committee (2022 – 27), RAS Library Committee (2020 –).

Internal service - Higgs Centre for Theoretical Physics Management Committee (2020 –); Full recruitment exercises for Flora Philip Fship (2023, 2022, SoM), Elizabeth Gardner Fship (2022, SoPA), ACM Lecture/Readership (2022, SoM), Higgs Senior Fship, Higgs Lecture/Readership (2021, SoPA), Whittaker Fship (2019, SoM), and 5 PDRA posts.

PhD external examiner [8] - Nicolaus Copernicus Astronomical Center, CZ (2023), Indiana Univ., USA (2023), Observatoire de Strasbourg, FR (2022), Institut d’Astrophysique Paris, FR (2020, 2023), Univ. Bologna, IT (2016, 2023), Sterrewacht Leiden, NL (2015). PhD internal examiner, or chair [2]: ACM (2023, 2024).

PhD admission examiner - Martingale Foundation (ACM, 2023), MAC MIGS CDT (ACM, 2020 – 23).

Reviewer - Science and Technology Facilities Council (STFC), UKRI Peer Review College, National Science Centre Poland, Carnegie Trust for the Universities of Scotland, European Commission Research Executive Agency, National Commission for Scientific and Technological Research in Chile, American Astronomical Society.

Referee - PRL, PASA, A&A, ApJ/L, MNRAS/L.

Research supervision & Teaching

P = Physics; AP = Astrophysics; TPMP = Theoretical Physics & Mathematical Physics; ACM = Applied & Computational Maths

Postdoctoral activities [4] - Simon Rozier (2023 – 25, Royal Society Newton Fship) • Pete Kuzma (2020 – 23, UKRI FLF) • Philip Breen (2016 – 19, with D. C. Hoggie, Leverhulme RPG) • Alice Zocchi (2016, Carnegie RIG).

PhD theses [5] - Lucy Ardit (AP 2024 –) • Daniel Meikle (ACM 2024 –, w/ A. Olde Daalhuis) • Samuel Bonsor (ACM 2020 – 24, w/ J. Vanneste) • Frederika Phipps (AP 2018 – 22, w/ S. Khochfar; RSE Saltire Early Career Fship) • Maria Tiongco (AP 2012 – 18, w/ E. Vesperini; 2016 AAS Duncombe Prize for Dynamics).

Postgraduate projects [13] - Ria Dunn (ACM 2023, w/ G. Vasil) • Alex Livernois (AP 2018 – 23, w/ E. Vesperini) • Verónica Vázquez (AP 2018 – 20, w/ P. Amaro Seoane) • Simon Rozier (AP 2018 – 20, w/ C. Pichon) • Ian Claydon (AP 2015 – 19, w/ M. Gieles) • Paolo Bianchini (AP 2015 – 16, w/ G. van de Ven; 2014, w/ F. Renaud) • Kathryn Daniel (AP 2014 – 16, w/ D. C. Hoggie) • Ben Bar-Or (AP 2014 – 15, w/ D. C. Hoggie) • Filippo Contenta (AP 2014 – 15, w/ D. C. Hoggie) • Maxwell Cai (AP 2014 – 15, w/ M. Gieles, D. C. Hoggie) • Rosemary Shanahan (AP 2014, w/ M. Gieles) • Maria Cordero (AP 2013, w/ C. Pilachowski) • Owen Boberg (AP 2013, w/ E. Friel).

Master’s theses [7] - Syaza Izzati (MScR ACM 2024, with M. Ruffert) • Lucy Ardit (MPhys TPMP 2022) • Hexuan Zhao (MSc TPMP 2021) • Marine Demarty (MSc TPMP 2020, w/ J. A. Peacock) • Sarah Heinzelmann (MSc TPMP 2018, w/ S. Khochfar) • Paolo Bianchini (MSc P 2012, w/ G. Bertin) • Alice Zocchi (MSc P 2010, w/ G. Bertin).

Bachelor’s theses, Senior Honours, Summer projects [10] - on topics in P, AP, TPMP, ACM; individual and small groups, including summer scholarships competitively awarded by Carnegie Trust and SoPA Career Development Fund.

Postgraduate - Co-organiser: STFC National Intro to Astronomy (Edinburgh, 2025); Invited lecturer: International Alpine School of Maths and Physics (Domodossola, 2023, declined for medical leave); STFC National Intro to Astronomy (Dundee, 2022); Kavli Summer Program in Astrophysics (Toronto, 2014).

Undergraduate - Developer, lecturer, and tutor of “Mathematics of galaxies” (Yr4/5, SoM, 2023, ~ 60 stdnts); Co-lecturer and tutor of “Mathematics for Physics 1” (Yr1, SoPA, 2019 – 23, ~ 250 stdnts) and other Yr1 Astro/Maths courses (SoPA 2016 – 18; SoM 2014 – 15); Assessor of ACM/AP/TPMP projects and examiner in pre-honours TPMP (2019 – 23).

Diversity & Outreach highlights

Service - University Working Group on staff-student complaint process revision, incl. gender-based violence (2024); University Research Culture Forum (2021 –); Equality, Diversity & Inclusion Committee (SoM 2022 –; SoPA, 2020 – 22).

Mentorship - External: Martingale Foundation (2023 –), Aurora Leadership Programme (2023 –), NHS Mental Health First Aider (2022) • Internal: Liaison Officer for bullying and harassment; Maxwell Institute Graduate School - Confidential Pastoral Contact; SoPA Graduate School Pastoral Team (2020 – 22).

Public initiatives and lectures - Gardner Lecture Series (2023 –) • Higgs Summer Forum: “Carer/Parent/Physicist” (2023) • RSE Curious: “Space junk, biomaterials, and green computers” (2022) • Higgs “Idea Collection” [videos] (2021) • “Edinburgh’s first women physicists and mathematicians” [gallery] (2021) • “Women in Astronomy at ROE and around the world” [video] (2020) • “My Science, Our Dialogue” (Tokyo, JP, 2019) • NASA “Astro4girls” [prezi] (Carmel, USA, 2013).

Media & Press - BBC Radio “More or Less” [podcast] (2024) • Piscopia’s “Mathematician of the Month” (2024) • Aspen KDNK Radio [podcast] (2022) • “Women in Science & Music” [podcast] (2021) • “The Nature of Play”, Fanny & Alexander (2019) • Magazine “Astronomy”: “Motion of stars” [article] • RAS: “Ski or jump? How neutron star kicks can break up clusters” [press] (2015) • Several SoPA/SoM promotional [videos] and interviews/projects by UoE undergraduates.