

Richard Alexander

School of Physics & Astronomy, University of Leicester

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🌐 rdalexander.github.io

Employment

2009 –	School of Physics & Astronomy, University of Leicester Professor of Theoretical Astrophysics (2019–) Reader (Associate Professor) in Theoretical Astrophysics (2015–2019) Lecturer in Theoretical Astrophysics (2009–2015) STFC Advanced Fellow (2009–2015) [Paternity leave: March–June 2012]
2007 – 2009	Sterrewacht Leiden, Leiden University Postdoctoral Fellow
2005 – 2007	JILA, University of Colorado Postdoctoral Research Associate

Education

2002 – 2005	Institute of Astronomy, University of Cambridge PhD in Astrophysics Supervisor: Prof. Cathie Clarke
1997 – 2002	University of Edinburgh MPhys(Astrophysics) with First Class Honours

Research Supervision

PhD students	Simin Tong (2022–); Giulia Ballabio (2017–20); Tom Hands (2012–16); Alex Dunhill (2010–13)
Postdocs	Sahl Rowther (2022–); Alison Young (2019–21); Andrew Winter (2019–20); Enrico Ragusa (2018–21); Rebecca Nealon (2017–20); Cassandra Hall (2017–20); Giovanni Dipierro (2017–19); Stephen Fendyke (2014–16)
Pre-doctoral	Sarah Crick (née Smedley), SURE summer research student (2010); Daniel Harsono , MSc research project (Leiden University; 2008–09)

Current Teaching & Lecturing

2022 –	Lecturer & module lead (2023–) for 4th-year course SMBHs & Exoplanets
2021 –	Departmental postgraduate tutor (i.e., PhD programme director) Lecturer & module lead (2022–) for 3rd-year course Quasars & Cosmology
2015 –	Lecturer & module lead (2017–) for 1st-year core physics course Waves & Quanta
2011 –	Module lead for postgraduate course Formation of Planetary Systems , University of Leicester & Midlands Physics Alliance Graduate School (MPAGS)

Research Grants (as Principal Investigator)

2022 – 2026	Science & Technology Facilities Council (UK) PI of funded project (£525k) within departmental Consolidated Grant (£1.5M total)
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Research Grants (as Principal Investigator) (continued)

2016 – 2021	European Research Council (EU) Consolidator Grant (€1.95M, PI)
2014 – 2017	The Leverhulme Trust (UK) Philip Leverhulme Prize (£70k, PI)
2013 – 2016	Science & Technology Facilities Council (UK) PI of funded project (£154k) within departmental Consolidated Grant (£4.8M total)
2009 – 2015	Science & Technology Facilities Council (UK) Advanced Fellowship (£498k, PI)

Large Facility Awards

- Competitively-allocated large awards on the [NCSA](#) (USA), [NCF](#) (Netherlands) and [DiRAC](#) (UK) high-performance computing facilities, totalling over 60 million CPU hours. Recent highlights include PI awards on DiRAC in 2021, 2023 & 2025.
- More than 20 competitively-allocated observing time awards on international telescopes. Recent highlights include large programmes on the [ESO Very Large Telescope](#) and the [Hubble Space Telescope \(Odysseus\)](#), and projects on [JWST](#) and [ALMA](#).

Service & Peer Review

- Grants panel membership: STFC Ernest Rutherford Fellowships (2020–2024); PRACE–DECI (2020); NASA *Origins of Solar Systems* (2010, 2013)
- Referee for *Science*, *Nature*, *ApJ*, *ApJL*, *ApJS*, *MNRAS*, *AJ*, *A&A*, *New Astronomy Reviews*, *Space Science Reviews*: typically 4–6 articles per year.
- Review of grant applications for STFC, UKRI, Royal Society, RAS, Leverhulme Trust (UK), NASA (USA), NWO (Netherlands), FWF (Austria), CSCS (Switzerland), CONICYT (Chile).

Selected Invited Talks

2024	<i>Formation of the protosolar disk & its first planetesimals</i> , Collège de France (invited lecture)
2023	<i>Core-to-Disk III</i> , Saclay, France (keynote review)
2020	<i>The Solar-Stellar Connection</i> , Warwick, UK (summer school lecturer)
2018	<i>Where are the young planets?</i> , Madrid, Spain (keynote review)
2017	<i>The migration issue</i> , Cambridge, UK (conference-opening review)
2016	<i>Star formation 2016</i> , Exeter, UK (keynote review)
2014	<i>Protoplanetary disks and planets</i> , Santiago, Chile (keynote review)
2013	<i>Protostars & Planets VI</i> , Heidelberg, Germany (PI of review chapter)

Publication & Citation Summary

- 90 peer-reviewed papers (published or in press)
- 21 peer-reviewed papers as lead author
- 28 peer-reviewed papers lead-authored by students and postdocs under my supervision
- >5000 total citations; *h*-index of 40