



IN CONFIDENCE: CURRICULUM VITAE

The font and margins of the template must not be altered. **DO NOT** delete any section. Blank rows can be deleted. Applicants who complete the section on Career Breaks may extend the limit of two sides of A4 to accommodate this additional information.

Name (title, first name(s), surname): Dr Eloy de Lera Acedo
Nationality (Citizenship if appropriate): Spanish (ILR in UK)
Email: eloy@mrao.cam.ac.uk

Is your choice of host institution due to personal reasons?	Yes:	<input type="checkbox"/>	No:	<input checked="" type="checkbox"/>
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Employment: Provide details of your employment in chronological order (most recent first)				
Dates		Organisation and position held	Type of appointment e.g. permanent, fixed-term, full-time, part-time etc	
From	To			
2018	-	Principal Research Associate at Cavendish Astrophysics, University of Cambridge	Open-ended (project funded)	
2013	2018	Senior Research Associate at Cavendish Astrophysics, University of Cambridge	Open-ended (project funded)	
2010	2012	Research Associate at Cavendish Astrophysics, University of Cambridge	Fixed-term	
2007	2010	Research Assistant at Cavendish Astrophysics, University of Cambridge	Fixed-term	
2006	2007	Research Assistant at National Astronomical Observatory, Spain	Fixed term	

Career Break and other Interruptions as listed in the guidance:		
Dates		Reason (optional)¹
From	To	
03/2012	05/2012	Humanitarian help in a school for blind children in Cameroun.

Education: Undergraduate and postgraduate studies					
Dates		University/College attended	Department	Subject	Class of award
From	To				
2006	2010	Carlos III University & University of Cambridge	Physics/Electronic Engineering	Physics/Engineering	PhD (summa cum laude)
2000	2005	Carlos III University, Madrid	Electronic Engineering	Electronic Engineering	MSc (summa cum laude)

Provide a brief description for the following:
Prizes, awards and honours received: Bye-fellowship at Downing College (Cambridge, 2015); COST travel award (2018,2014); Radionet travel award (NL, 2007); MCCT travel award (2007); Best academic record in Madrid (Madrid, 2005).
Research Interests and Key achievements: My research interest is in radio cosmology, 21-cm cosmology, Cosmic Dawn, Epoch of Re-ionization; radio instrumentation. I have led the development of the antennas and front-end receivers for SKA and HERA. I have produced innovative designs of ultra-wide band antenna and low noise electronics for the SKA telescope that have granted me international recognition, leading to the deployment of a 256-element array in Western Australia. I have carried out world-leading electromagnetic studies to establish fundamental limits on the bandwidth and energy absorption capabilities of radio antennas as well as their in-field characterization and pioneering work on numerical methods for the ultra-fast

¹ Please be aware that this information will be shared with reviewers and panel members.

analysis of electrically large antennas. Since 2018 I am the PI of the REACH telescope (39 international collaborators) and I am the head of the cm-wave radio astronomy and novel sensors research group at Cavendish Astrophysics (3 postdocs, 6 research students). I have attracted over £2M external funding for projects I lead.

Teaching experience (include dates): Head of class Part 1b Physics (2nd year NatSci), University of Cambridge (since 2017); Teaching associate in Physics/Engineering at Downing college, University of Cambridge (since 2013); Lecturer and head of class INSTAE (Institute of Education in Space technology, 2012-2018); Lecturer of the Board of European Students of Technology (2012); Lab demonstrator of Part 1a Physics University of Cambridge (2008-2011). Examiner of: 1 MSc and 1 PhD thesis at the University of Stellenbosch, South Africa, 1 PhD thesis at Rhodes University, 3 MPhil theses and 4 first year PhD reports at the University of Cambridge, 1 PhD thesis at the University of Cambridge, 2 MSc theses at the Universite catholique de Louvain, Belgium, Year 1 engineering exams, Downing College (since 2011).

Student supervision - PhD and undergraduate (include dates): 5 full time PhD students at the University of Cambridge (since 2015); 1 MPhil student at the University of Cambridge (2019-2020); 3 PhD visiting students at the University of Cambridge (2017-2020); 6x Part III research projects at the University of Cambridge (since 2012); 6x 12 weeks research summer internships at the University of Cambridge (since 2012).

Scientific responsibilities held (e.g. committee & working group membership, coordinator & convenor roles, space mission involvement): SKA Epoch of Re-ionization Science Working Group (since 2019); Executive Board member HERA project (since 2018); Executive Board of COST action 18223 SyMat (since 2019); Technical Program Comitee EuCAP 2018, 2019; Experimental facilities development for Cavendish III - working group member (since 2015); IET member, URSI member.

Main Collaborators: AProf Aaron Parsons and Dr David DeBoer (Berkeley) and Prof Jacqueline Hewitt (MIT) in the HERA project; Dr Colin Lonsdale and Dr Frank Lind (MIT-Haystack) in the RAPID project; Prof Leon Koopmans (Groningen); Prof Anthony Brown and Prof Keith Grainge (Manchester), Dr Kris Zarb Adami (Oxford), Prof Christophe Craeye (UcL Belgium) and Dr Wim van Capellen (ASTRON, NL) in the SKA project; Dr Lincoln Greenhill (Harvard) in the REACH/LEDA collaboration; Prof Dirk de Villiers (Stellenbosch), Dr Jonathan Pritchard (Imperial), Prof Oleg Smirnov (Rhodes), Dr Chris Carilli (NRAO), Dr Anastasia Fialkov (Cambridge); Prof Richard Hills (Cambridge), Dr Gianni Bernardi (INAF) in the REACH project.

Conferences & Seminars (list events organised with dates and talks given with dates): Lead organizer of the 3rd Global 21-cm Workshop (October 2020); SOC HERA annual meetings; Organizer of convened sessions in 14 prestigious international conferences in the fields of Radio Astronomy, Electromagnetism and Antennas: PIERS 2013, European Space Agency Antenna Workshop 2015, EuCAP 2014, 2016, 2017, 2018 and 2019, ICEAA 2015, 2016, 2017 and 2019, US-URSI 2016, AT-RASC 2018 (2 sessions). 15+ invited talks in international venues such as CSIRO, Sydney (2016), OAN, Spain (2017), Manchester University (2019)..., or international conferences such as IEEE APS, ICEAA, EuCAP, etc.

Refereeing (include dates): STFC standard proposal reviewer (since 2015); Reviewer of journal papers in Experimental Astronomy, RadioScience, American Astronomical Society, IEEE Transactions on Antennas and Propagation, IEEE Antennas and Wireless Propagation Letters and Advanced Electromagnetics (since 2011); Reviewer of international conference such as European Conference on Antennas and Propagation, IEEE International Symposium on Antennas and Propagation and URSI (Commission J) since 2014.

Citations- List your top five publications /reports together with the ISI citation rate:

- 1- de Lera Acedo et al., MNRAS, Volume 469, Issue 3, August 2017, Pages 2662–2671, <https://doi.org/10.1093/mnras/stx904>; (9)
- 2- Trott, de Lera Acedo et al., MNRAS, Volume 470, Issue 1, September 2017, Pages 455-465, <https://doi.org/10.1093/mnras/stx1224>; (6)
- 3- de Lera Acedo et al. Exp Astron 39, 567–594 (2015). <https://doi.org/10.1007/s10686-015-9439-0>; (77)
- 4- de Lera Acedo et al., IEEE TAP, Vol. 58 (1), pp. 68-78, January 2010. <https://ieeexplore.ieee.org/abstract/document/5313927>; (65)
- 5- DeBoer, ..., de Lera Acedo, et al., 2017 *PASP* 129 045001, <https://iopscience.iop.org/article/10.1088/1538-3873/129/974/045001/meta> (303)