

Curriculum Vitae of Prof. Dr. Amina Helmi
Kapteyn Astronomical Institute
University of Groningen
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Date and place of birth: 6/10/1970, Bahia Blanca (Argentina)
Nationality: Argentina/Netherlands

Education

PhD in Astronomy (2000), The formation of the Galactic halo Leiden University (“Cum Laude”),
supervisors: P.T. de Zeeuw and S.D.M. White
MSc in Astronomy (1994), specialization in Theoretical Physics, University of La Plata (9.94/10)

Work experience since completing PhD

Professor of Dynamics, Structure and Evolution of the Milky Way, Univ. of Groningen	2003 – to-date
NOVA Postdoctoral Fellow, Univ. of Utrecht:	2002 – 2003
Postdoctoral Fellow, Max Planck Inst. for Astrophysics:	2001 – 2002
Postdoctoral Fellow, University of La Plata:	2000

Research Interests: Structure, evolution and dynamics of the Milky Way and its satellites; dark matter

Honours and prizes

Member, Royal Netherlands Academy of Sciences (KNAW, elected in 2017)
Member, Royal Holland Society of Sciences and Humanities (KHMW, elected in 2016)
VICI research grant (Innovation Scheme, NWO) 2015
Pastoor Schmeits prize, 2010
ERC Starting Grant (European Science Foundation) 2009
Member, The Young Academy, Royal Netherlands Academy of Sciences (elected in 2007)
Member, International Astronomical Union
Christiaan Huygens Prize, 2004
VIDI research grant (Innovation Scheme, NWO) 2003
CJ Kok prize, University of Leiden, 2000
Amelia Earhart Fellowship Award, 1995 and 1997

Academic staff supervised

Former PhD students: H. Tian (2017), T. K. Starckenburg (2016), J. T. Buist (2015), G. Monari (2014), M. Breddels (2013), C. Vera-Ciro (2013), E. Starckenburg (2011, with E. Tolstoy), F. Gomez (2010), Y. S. Li (2009), A. Villalobos (2009), G. Battaglia (2007, with E. Tolstoy), M. Williams (2008, Australia, co-supervision); P. Re-Fiorentin (2005, Italy, co-supervision)
Current PhD students: T. Versic (2021), J. Hagen (2019), H. Koppelman (2020), P. van Oirschot (2018)
Former Postdocs: M. Breddels (2013-2018), S. Jin (2011-2014), R. Sanderson (2011-2014), M. T. Antoja (2010-2012), L. Sales (2007-2010), M. Smith (2004-2007), E. Ripamonti (2003-2006, with E. Tolstoy)
Current Postdocs: D. Massari (2017 – 2020), L. Posti (2016 – 2020), J. Veljanoski (2014-2018)

Research output

Author or co-author of 182 refereed publications in international journals.
Author or co-author of 112 conference proceedings and other academic publications.
Approximately 19,000 citations according to ADS
H-index: 68

Teaching experience

Lecturer Physics of Galaxies (2003-2008), Wiskunde 2 (2009–2011), Dynamics of Galaxies (2009-2015),
Capita Selecta on the Milky Way (2008-2013), Statistical and Numerical Methods (2014-2017), Numerical

Methods (2018-to-date), Formation and evolution of galaxies (2015-to-date)

Bachelor students supervised: E. Wempe (2018), D. Koot (2017), S. van Eijk (2017), T. Heldeweg (2016), C. Hesp (2015); J. Hartke (2015), J. Heit (2013), J. Ruwen (2009), M. Blauw (2009), M. Breddels (2007),
MSc students supervised: B. Roelenga (2018), T. Virginiflosia (2017), H. Koppelman (2016), J. Hagen (2015), T. Starkenburg (2011), E. Starkenburg (2007), F. Lugt (2004)

Invited reviews given at Conferences in 2011 – to date*

2018: EWASS (Liverpool), NAC (Groningen), Spanish Astronomical Society (Salamanca)

2017: ‘Rediscovering our Galaxy’ (Potsdam), ‘The science of Gaia and future challenges’ (Lund), ‘Reaching New Heights in Astronomy’ (ESO, Munich)

2015: ‘ESO in the 2020s’ (Munich); ‘Dark matter in the Galaxy’ (Amsterdam); ‘Satellites and stellar streams’ (Santiago); ‘The New Milky Way’ (Munich); Plenary talk at EWASS (Tenerife); ‘IAU Symposium 319: The general assembly of stellar halos’ (Hawaii); Division meeting H on The Milky Way in the era of Gaia (Hawaii); ‘ReSolving Galaxies in The Era of Extremely Large Telescopes’ (Monterrey)

2014: ‘Star formation and Galactic Structure’ (Groningen); ‘Testable solutions to the dark matter problem: theory & observations, EWASS’ (Geneva); ‘IAU Symposium 311: Galaxy Masses as Constraints of Formation Models’ (Oxford); ‘Satellite galaxies and dwarfs in the Local Group’ (Potsdam)

2013: ‘PN.S future: projects and ideas’ (Leiden); ‘The scientific legacy of Sersic’ (Cordoba); ‘Galaxies within the cosmic web’ (Chicago); Gaia Challenge 2013 (Sussex), ‘From Dwarfs to Giants’ (Sesto)

2012: ‘Structure of galaxy disks, EWASS’ (Rome); ‘Galactic Archaeology Surveys’ (Sydney); ‘Dynamics meets Kinematic Tracers’ (Ringberg); ‘First Galaxies and Faint Dwarfs: Extreme Probes of the Cold Dark Matter Paradigm’ (Santa Barbara);

2011: ‘Assembling the Puzzle of the Milky Way’ (Le Grand-Bornand); ‘Bologna Informal Workshop on Dark Matter 2011’ (Bologna); ‘Galaxy Formation’ (Durham); ‘Galaxies in the dark’ (Salta)

Total number of invited reviews given since 2003: 64

Departmental Colloquia in 2011 – to date

Lausanne, 2011; Amsterdam 2011; Zürich 2012; Cordoba 2013; Groningen 2014; Leicester 2014; Santiago 2014; Cordoba 2015; Göttingen 2016; Amsterdam 2016; Dwingeloo 2017; Groningen 2018; Utrecht 2018; Heidelberg 2018; Munich 2018; New York Big Apple Colloquium 2018 (and pending invitations to Liverpool, Cambridge, Lund, Leuven, Harvard)

Total number of colloquia given since 2003: 22

International academic activities (most important)

Committees:

- Scientific Member, ESO Council for the Netherlands, 2018 –
- Co-Chair, ESO’s OPC, Galaxies panel, 2012 – 2013
- Member, Science Advisory Group to ING director, 2012 – 2015
- Member, Astronomy Working Group, ESA, 2007 – 2010
- Member, ESO/ESA Working Group on the Milky Way, 2007 -2008
- Member, ASTRONET European Science Vision working group, panel B (Galaxies)

Projects:

- PI of the Low Resolution Halo Key Science Survey, and member of the Science Steering Committee, 4MOST project, 2011 – to-date
- Lead of “Validation” and “Visualization of multi-D Gaia data” work packages, CU9, Gaia, 2013 – to-date
- Member, Science team of WEAVE project, 2012 – to-date
- Member, RAVE Executive Board, 2003 – to-date
- Co-lead, Milky Way Science Working Group, Euclid Mission, 2011 – 2013
- Member, ‘Chemical Tagging working group’ (Gaia Research for European Astronomy Training), 2007 – 2009

Other:

- Co-organizer of more than 20 international meetings, including SOC of 1 IAU JD and 3 IAU Symposia, and a Royal Society/KNAW/Chinese Academy of Sciences “Frontiers in Science” workshop in China
- Referee for grant allocation for UK, US, Canada, Germany, Japan, Argentina, Chile, Sweden, Germany, Hungary, ERC St. and Advanced Grants

* This list includes only invited talks *given*, but I typically receive 2 to 3× more invitations.

- Referee of Nature, Science, ApJ, ApJL, AJ, MNRAS, A&A, PASA, PRD, PRL, Phys. Lett. A & B, JCAP
- Referee of PhD thesis in Oxford, Leiden, Groningen, Potsdam, Bologna

National activities (most important)

- Research Coordinator of Network 1: “Cosmology and Galaxies” for NOVA, (Netherlands Top Research School for Astronomy), 2013 -- 2018
- Chair NOVA research committee, 2017 – 2018
- Member, Grant Assessment Committee for Astronomy, NWO: 2004 –
- Jury member of the ‘Nationale Wetenschapsagenda’, KNAW: 2015

Local

- Member of the University Committee for Academic Practice, representative of the Faculty of Mathematics and Natural Sciences of the University of Groningen (2014 – 2016)
- Rosalind Franklin selection committee, Faculty of Mathematics and Natural Sciences of the University of Groningen (2011)
- Assessment committee for promotion from Assistant to Associate Professor, Faculty of Mathematics and Natural Sciences of the University of Groningen (2015 – 2018)

Grants, scholarships and prizes

Scholarship/Grant/ Prize as PI	Amount	Year of award
NWO-M instrumentation grant	252,000 EUR	2017
VICI research grant	1,500,000 EUR	2015
NOVA research grant	200,000 EUR	2013
NOVA instrumentation grant	180,000 EUR	2013
Pastoor Schmeits prize	N.A.	2010
ERC Starting Grant	1,600,000 EUR	2009
NOVA research grant	200,000 EUR	2009
NWO Open Competition	100,000 EUR	2005
VIDI research grant	600,000 EUR	2003
Christiaan Huygens prize	N.A.	2003
CJ Kok prize	N.A.	2000
Amelia Earhart Fellowship	6,000 USD	1995 and 1997
<i>Subtotal: 12</i>	<u>4,638,000 EUR</u>	
Scholarship/Grant/Prize as Co-PI		
NWO-M instrumentation	960,000 EUR	2013
NOVA Instrumentation	500,000 EUR	2013
NOVA research grant	200,000 EUR	2008
NOVA instrumentation grant	200,000 EUR	2008
NWO STARE program	500,000 EUR	2006
NWO Open Competition	200,000 EUR	2003
<i>Subtotal: 6</i>	<u>2,560,000 EUR</u>	