

Curriculum Vitae of Prof. Dr. Amina Helmi
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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: Dynamics, structure and evolution of the Milky Way; Galactic archaeology;
dwarf galaxies; dark matter

Honours and prizes

Dirk Brouwer Career Award, 2021
Knight in the Order of the Dutch Lion, 2021
Spinoza Prize, 2019
Suffrage Science Award, Physical Sciences and Engineering, 2019
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 (2007-2011)
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

Distinguished Lectureships

Halley Lecture, Oxford, 2022
Biermann Lecturer, Max Planck Institute for Astrophysics, 2022
Lodewijk Woltjer Lecture, 2021
Merle Kingsley Distinguished Visitor at Caltech (postponed due to Covid19), 2020
Boris Garfinkel Lecture, Yale (postponed due to Covid19), 2020
Niels-Bohr Lecture, Copenhagen, 2020

Academic staff supervised

Former PhD students (20): O. Koop, E. Dodd, A. Vishwanathan*, H. Koppelman, J. Hagen, P. van Oirschot*, H. Tian, T. K. Starkenburg, J. T. Buist, G. Monari, M. Breddels, C. Vera-Ciro, E. Starkenburg*, F. Gomez, Y. S. Li, A. Villalobos, G. Battaglia*, M. Williams*, P. Re-Fiorentin* (*shared)
Current PhD students: E. Wempe, H. Woudenberg
Former Postdocs (14): T. Matsuno, E. Balbinot; S. Khanna, T. Ruiz- Lara, D. Massari, L. Posti, J. Veljanoski, M. Breddels, S. Jin, R. Sanderson, M. T. Antoja, L. Sales, M. Smith, E. Ripamonti*
Current Postdocs: T. Callingham

Research output

Author or co-author of 258 refereed publications in international journals.

Author or co-author of more than 170 conference proceedings and other academic publications.

Approximately 56,200/66571 citations and H-index 99/106 according to ADS/Google Scholar. In the period 2018-2023, 20%(60%) of the publications amongst 1%(10%) most cited per year.

[Link to publication list ADS](#)

Teaching experience

Lecturer: Evolving Universe, Physics of Galaxies, Calculus and Algebra for engineers, Statistical and Numerical Methods, Numerical Methods, Capita Selecta on the Milky Way, Galaxy Formation and Evolution, Galactic Dynamics

Supervision: 18 BSc students' thesis and 9 MSc students' thesis

Invited reviews and colloquia in 2018-2024

Conferences: Golden years (Leiden), Milky Way Assembly (Bologna), TESS/Kepler workshop (Porto), Small Galaxies, Cosmic Questions II (Durham), IAU Symposium (Paraty, Brazil), WE-Heraeus Symposium (Berlin), Falling Walls (Berlin), Pontifical Academy of Science (Rome), DDA (New York), APS Plenary (Washington), ESLAB (Noordwijk), IAU Symposium (Shanghai), Farewell S. White (Garching), EWASS (Liverpool), NAC (Groningen), Spanish Astronomical Society (Salamanca)

Total number of invited reviews given since 2003: 76

Colloquia: IAS/Princeton U, LJMU, STSci/JHU, U of Michigan, Copenhagen, Madrid (ESAC), TNO Delft, ITC Harvard, New York Big Apple Colloquium, Munich, Heidelberg, Utrecht, Groningen (pending invitations from Astro MIT, Physics MIT, EuCAPT, Trieste, AEI)

Total number of colloquia given since 2003: 30

International academic activities (most important)

Committees:

- Scientific representative for the Netherlands at ESO Council, 2018 – 2024
- Senior Advisory Committee 'Voyage 2050' member, ESA, 2019 – 2021
- 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 – 2022
- Lead of "Validation 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 – 2018
- Co-lead, Milky Way Science Working Group, Euclid Mission, 2011 – 2013
- Member, 'Chemical Tagging working group' (seeds for WEAVE and 4MOST), 2007

Other:

- Co-organizer of more than 20 international meetings, including IAU JD and IAU Symp, and "Frontiers in Science" workshop
- Referee for grant allocation for UK, US, Canada, Germany, Japan, Argentina, Chile, Sweden, Germany, Hungary, Switzerland, ERC St. and Advanced Grants
- 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)

Administration:

- Scientific Director NOVA (Netherlands Top Research School for Astronomy), 2022 - 2023
- Deputy Scientific Director NOVA (Netherlands Top Research School for Astronomy), 2019 –2020
- Leader "Sectorplan" Astronomy (resulted in permanent funding for NOVA from 2023 onwards)
- Chair NOVA Research Committee, 2017 – 2018
- Research Coordinator of Network 1: "Cosmology and Galaxies" for NOVA, 2013 – 2018

Service:

- Selection Committee new members KNAW (Domain Exact and Natural Sciences): 2018 –
- Member, Grant Assessment Committee for Astronomy, NWO: 2004 –
- Jury member of the 'Nationale Wetenschapsagenda', KNAW: 2015
- 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

A total of 22 grants and prizes received for 28,417 kEUR (see details in table)

As PI	Amount	Year of award
Spinoza prize	2,500,000 EUR	2019
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
<u>Subtotal: 12</u>	<u>7,138,000 EUR</u>	
As Co-PI		
<u>Subtotal: 11</u>	<u>21,769,000 EUR</u>	2003 - 2024

Outreach activities

(incomplete summary of the last 5 years)

- Regular appearances in the media:
 - Personal interviews in newspapers/magazines: NRC, de Volkskrant, Algemeen Dagblad, Trouw, Dagblad van het Noorden, Broerstraat 5, Nederlandse Tijdschrift voor de Natuurkunde, Elsevier Weekblad (*Dutch*); El Pais, El Mundo, Clarin (*Spanish*); Sky and Telescope, Scientific American (*English*); Der Spiegel (*German*)
 - TV: Nieuwsuur (NPO2, prime national), OOG (local), NHK Cosmic Frontier (Japan), BBC (UK)
 - Several podcasts and videos (e.g. wetenschap.nu; ESA TV; Kosmos series, Chinese bilibili.com)
 - Radio: Nieuws en co (NPO1), BNR, Onderweg naar morgen (NPO1), OOG Radio, BBC
- Public Lectures: typically receive more than 5 requests per year, of which I can honour 2 to 3, some highlights include Fundación BBVA (Madrid), KNAW, KNG, Gala van de Astronomie, Paradiso