Dr. S. (Selma) E. de Mink

Astrophysicist - MacGillavry Assistant Professor Anton Pannekoek Instituut voor Sterrenkunde, Univ. of Amsterdam, PO Box 94249, 1090 GE Amsterdam, The Netherlands <u>S.E.deMink@uva.nl</u> / <u>http://www.selmademink.com</u>

INTEREST/EXPERTISE (IN NO PARTICULAR ORDER)

Stellar Physics, Stellar evolution, Stellar evolution under extreme conditions Stellar Transients, Progenitors of Supernovae and Gamma-ray bursts Gravitational Wave Astrophysics, Astrophysical sources and their progenitors Binary Interaction, Binary Mergers, X-ray binaries Nucleosynthesis, Abundances, Chemical Enrichment Spectral synthesis, Radiative and Mechanical Feedback by stellar populations Surveys of stellar populations (nearby and at high redshift) and stellar transients Diversity in Academia, Participation of Women in Theoretical and Computational Astrophysics

RESEARCH POSITIONS

MacGillavry Assistant Professor, University of Amsterdam, NL
• PI of VIDI grant BinWaves (2018-2023)
• PI of the ERC starting grant BinCosmos (2017-2022)
Marie Curie Incoming Fellowship (2015-2017)
Einstein & Princeton Lyman Spitzer Fellow (Combined prize fellowships, 100% independent
research)
California Institute for Technology & Carnegie Observatories, Pasadena, CA, USA
Hubble postdoctoral Fellow (NASA prize fellowship, 100% independent research)
Space Telescope Science Institute, Baltimore, MD, USA
Argelander Postdoctoral Fellow
Institute for Astronomy, University of Bonn, Germany
PhD Student, Utrecht University, The Netherlands
IAC summer internship, Instituto d'Astrofíscia de Canarias, Spain

VISTING RESEARCH POSITIONS

2017, 2016	Short term visitor, Kavli Institute for Theoretical Physics, Santa Barbara, CA, USA
2015	Short term visitor, Center for Astrophysics, Harvard University, Cambridge, MA, USA
2013 - 2014	Visiting Associate, California Institute for Technology (Caltech), Pasadena, CA, USA
2010 - 2013	Visiting Associate, Johns Hopkins University, Baltimore, MD, USA

EDUCATION

2006-2010	PhD, Astrophysics, Utrecht University, NL, Awarded April 12, 2010	Cum Laude
	Thesis: Stellar evolution at low metallicity, Supervisor: Dr. O.R. Pols	
2003-2005	MSc, Astrophysics, Utrecht University, NL, Awarded Oct. 24 2005	Cum Laude
2000-2004	BSc, Mathematics, Utrecht University, NL, Awarded Oct. 31 2005	Cum Laude
2000-2003	BSc, Physics, Utrecht University, NL, Awarded Oct. 24 2005	Cum Laude

SELECTED AWARDS, HONORS, PRIZES

2017	7 Vidi laureate, awarded by Netherlands Science Foundation (NWO)	800 k€
2017	7 MERAC Prize in Theoretical Astrophysics 2017, European Astronomical Society	20 k€
2017	7 Beller Lectureship , awarded by American Physical Society	2 k€
2010	6 ERC starting grant, awarded by European Research Council	1,900 k€
2010	6 Nomination New Scientist Science Talent 2016, Dutch and Flemish Universities	
2015	5 Top grant , Netherlands Science Foundation (NWO)	220 k€
2015	5 Marie Curie Fellowship, awarded by European Council	166 k€
2014	4 MacGillavry Fellowship, Amsterdam Univ. (estimated)	450 k€
2013	3 Princeton Lyman J. Spitzer Fellowship, awarded by Princeton University	180 k€*
2013	3 Einstein Fellowship, awarded by NASA	266 k€*
2010	0 Hubble Fellowship, awarded by NASA	260 k€
2004	4 IAC summer Fellowship, Instituto d'Astrofíscia de Canarias, Spain	2 k€
2000	0 International Physics Olympiad, "Honorable Mention", Leicester UK	

PUBLICATIONS STATS & MOST HIGHLY CITED PAPERS

Papers with > 100 citatio	ons: 10*	Total number of refereed papers	>75
Papers with > 50 citation	ns: 21	Total number of publications	>110
Total number of citation	s: >3900	Hirsch factor	31
*Four as 1 st author, two	as 2 nd author & two a	us 3 rd author,	

Highest cited papers as 1st, 2nd or 3rd author (abbreviated titles)

>510 citations	Sana & de Mink et al. (2012), Science 337, 444 "Binary Int. Dominates the Evolution of Massive Stars"
>323 citations	Brott & de Mink et al. (2011), A&A 530, 115 "Grids of Rotating massive main-sequence stars"
>251 citations	De Mink et al. (2009) A&A, 507, 1 "Massive binaries as source of abundance anomalies in glob. clusters"
>158 citation	De Mink et al. (2013) ApJ 764, 166, "Rotation Rates of Massive Stars: The Role of Binary Interaction"
>157 citations	Sana, de Koter & de Mink et al. 2013, A&A 550, 107, "Multiplicity of the Tarantula O-type stars"
>154 citations	Bastian, Lamers & de Mink et al. MNRAS, 436, 2398, "Early disc accretion & glob. cluster abundances"
>116 citations	De Mink et al. (2009) A&A 497, 243, "Rotational mixing in detached short-period massive binaries."
>104 citations	De Mink et al. (2014) ApJ, 782, 7, "Incidence of Mergers and Mass Gainers among Massive Stars"
>98 citation	Mandel & de Mink (2016) MNRAS, 458, "Merging binary black holes through chem. hom. evolution"
>95 citations	Bastian & de Mink (2009) MNRAS, 398, 11, "Effect of rotation on colour-magnitude diagrams"
>66 citations	De Mink et al (2007), A&A, 469,1181 "Efficiency of mass transfer in massive close binaries."
>65 citation	De Mink & Mandel (2016), MNRAS, 460, "LIGO binary black holes through chem. hom. channel"
>55 citations	Claeys & de Mink et al. (2011), A&A, 528, 131, "Binary progenitor models of type IIb supernovae"
>49 citation	De Mink & Belczynski (2015), ApJ, 814, 58, "Merger Rates of Double Neutron Stars and Black Holes"

Most recent papers as first author or lead by directly supervised PhD student (marked with *)

Götberg* & de Mink et al. (2018) A&A "Unifying Subdwarfs and Wolf-Rayet stars" De Mink & King (2017) ApJ "Electromagnetic Signals Following Stellar-mass Black Hole Mergers" Götberg*, de Mink & Groh (2017) A&A "Ionizing spectra stripped binary stars" Zapartas* & de Mink et al. (2017a) A&A "Companions for Stripped-envelope Supernovae" Zapartas* & de Mink et al. (2017b) A&A "Delay-time distribution of core-collapse supernovae"

Citations updated Feb 10, 2018 based on NASA/ADS counts

INVITED AND CONTRIBUTED TALKS (SELECTION, FOR COLLOQUIA SEE BELOW)

2018 Sept.	(scheduled) Invited Plenary Talk, Physics of stellar feedback, Leibniz Inst. for Astrop. Potsdam,
	Germany
2018 July	(scheduled) Invited Review, COSPAR conference on compact objects, Pasadena, CA, USA
2018 July	(scheduled) Invited Talk, Diversity in Astronomy, Dark Cosmology Center, Copenhagen, Denmark
2018 July	(scheduled) Invited Review, Unsolved Problems in Astrophysics and Cosmology, Budapest, Hungary
2018, June	(scheduled) Invited Review, Ultra Luminous X-ray sources, Madrid, Spain
2018, May	(scheduled) Invited Talk, Sackler Conference on Gravitational waves, Cambridge, MA, USA
2018, April 5	(scheduled) Invited Talk, EWASS Gamma-ray bursts, UK
2018, March 21	(scheduled) Invited Plenary Talk, Finish Physics Days, Turku, Finland,

2018, Jan 23	Invited Talk, Physics days, Veldhoven, The Netherlands
2017 Nov 21	Invited Talk, Flatiron meeting on binary neutron star mergers, NY, USA
2017 Sept, 11	Invited Review, Progenitors of Gravitational Wave sources, Royal Society, UK
2017 June, 28	Invited Review, Gravitational wave Physics, Paris, France
2017 June, 27	MERAC prize lecture, Invited talk, European Astronomical Society, Prague, CR
2017 June, 1	Invited Review, Transients and the LSST revolution, Chicago, USA
2017 April, 18	Invited Participant/panel member, Cas A topical workshop, Princeton, NJ, USA
2017 Feb, 27	Invited Review, Strong Grav workshop, Oxford, MI, USA
2017 Jan, 30	Beller Prize Lecture, Invited talk, American Physical Society meeting, DC, USA
2016 Oct. 20	Invited Talk, Emission line galaxies at high redshift, Lorentz Center Workshop, Leiden, NL
2016 Sep. 21	Invited Talk, Year opening of the Department of physics and astrophysics, Amsterdam, NL
2016 Sep. 13	Invited Review Gravitational wave progenitors, MIAPP, Munich, Germany
2016 Sep. 13	Plenary Talk Invited, Astronomische Gesellschaft, Bochum Germany
2016 Aug.	Invited Review, Gravitational wave progenitors Gravitational Waves in Paris, France,
2016 Aug.	Invited Review, Binary evolution Stars on the run, Bamberg, Germany
2016 Aug.	Invited Talk, Astrophysics of the first gravitational waves, KITP, Santa Barbara, CA, USA
2016 July 26	Invited Talk Conference Binaries, Cambridge, UK
2016 July 7	Invited Talk, Conference of European society EWASS, Athens, Greece
2016 June 1	Invited Talk, Bridging the Gap, Supernova Royal Society Meeting UK
2016 May 17	Invited Talk, Sackler Conference Transients, Harvard, Cambridge MA, USA
2016 April 7	Invited Talk, Massive Stars and Star formation conference, Gainesville Florida
2016 Feb. 23	Invited Talk, DARK Cosmology Center Feedback Workshop, Copenhagen, Denmark
2015 Aug.	Invited Talk, General Assembly, Focus meeting Galaxies and Stellar populations, Honolulu, HI, USA
2015 Aug.	Invited Talk, General Assembly, Focus meeting Stellar Explosions, Honolulu, HI, USA
2015 May 11	Invited Talk, Gravitational wave meeting Cardiff, UK
2015 May 6	Contributed talk Gaia-ESO survey, Brussels, Belgium
2015, April 21	Invited talk, 25 th years of Hubble celebration meeting, STScI, Baltimore, Md, USA
2015, Jan 23	Contributed talk, Aspen meeting on Black holes, CO, USA
2014 Oct 8	Invited Talk, Time Domain Astrophysics with the Giant Magellan Telescope, Washington DC, USA
2014 Aug	Invited Review, Supernova in the local universe, Coffs Harbour, New South Wales, Australia
2014 Aug	Invited Talk, Gravitational Wave Astrophysics at COSPAR assembly, Moscow, Russia
2014 July 2014 Marsh	Invited Keynote Talk, A Critical Look at Globular Cluster Formation Theories, Sexten, Italy
2014 March	Invited Talk, Stellar Tango at the Rockies, Lake Louise, Alberta, Canada
2013 Nov	Invited Talk, Palomar Transient Factory, Science meeting, Santa Barbara, CA, USA
2013 Oct	Invited Talk, Einstein Fellow Symposium, Harvard, Cambridge, MA, USA
2013 Oct	Invited Talk, Palomar Transient Factory Sky House meeting, Santa Barbara, CA, USA
2013 Oct	Invited Talk, Massive Stars from alpha to omega, Rhodes, Greece Invited Seminar, TAPIR center for theoretical astrophysics, California Institute of Technology, CA, USA
2013 Sep 2013 March	Invited Seminar, TAPIK center for theoretical astrophysics, California Institute of Technology, CA, USA Invited Talk, Hubble Fellow Symposium, STScI, Baltimore, MD, USA
2012 Oct 2012 Oct	Contributed Talk, Outstanding problems in Massive Star Research, St Paul, MN, USA
	Contributed Talk, 30 Dor, the starburst next door, STScI, Baltimore, MD, USA Invited Talk, Aspen workshop on Massive stars and Gamma-ray bursts, Aspen, CO, USA
2012, July	
2011 Dec	Invited Talk, Lorentz Center Workshop Modelling Dense Stellar systems, Leiden, NL
2011 Sept	Invited Seminar, Stellar rotation: nature or nurture, KITP, Santa Barbara, CA, USA
2011 Sept	Invited Talk, CIERA inaugural meeting, Fellows at the Frontier of Science, Northwestern, USA Contributed Long talk, Conference in honor of A. Moffat, Canada
2011 July 2011 March	Invited Talk, Hubble Fellow symposium, Spitzer Science Center, Pasadena, CA, USA
2010 July 2010 July	Contributed Talk, meeting of the astronomische gesellschaft, Bonn, Germany
2010 July 2010 Jupe	Contributed Talk, 39th Liege Meeting, multi-wavelength view of massive stars, Liege, Belgium Contributed Talk, Binary star meeting, Mykonos, Greece
2010 June 2010 May	Contributed Talk, STScI May Symposium, Baltimore, MD, USA
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2010 April	Invited Review, JINA workshop Building virtual galaxies, Lansing, MI, USA
2009 Sept	Invited Talk, Lorentz Center workshops on stellar mergers, Leiden, NL
	Contributed Talk, IAU General Assembly in Rio, Brazil
2009 Aug 2009 June	Contributed Talk, Binaries Key to understanding the universe, Brno Czech Republic

2009 April	Invited Talk, European week of astronomy and space science, Hertfordshire, UK
2008 July	Contributed talk, Evolution and pulsation of massive stars, Liege, Belgium
2008 April	Contributed talk, Stellar modeling in the 21st century, Sanya, Hainan, China
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INVITED CC	OLLOQUIA AND SEMINARS (SELECTION, FOR REVIEWS ETC SEE ABOVE)
2018, March 20	(Scheduled) Invited Colloquium, Stockholm, Sweden
2018, Feb 27	(Scheduled) Invited Colloquium, Max Planck Institute for Astronomy, Heidelberg, Germany
2017, Oct 27	Invited Colloquium, NIKHEF, Amsterdam, The Netherlands
2017, Oct 18	Invited Colloquium, Max Planck Institute for Astrophysics, Garching Germany
2017, May 9	Invited City-wide colloquium, Heidelberg combined astrophysical institutes, Germany
2016	Invited Colloquium, Saclay, Paris, France
	Invited Colloquium, Kapteyn Institute Groningen, The Netherlands
2015	Invited Seminar, Princeton University, NJ, USA
	Invited Colloquium, Harvard Center for Astrophysics, Cambridge MA, USA
	Invited city-wide Colloquium, Joint Astrophysics Colloquium Munich MPA/MPE/ESO/USM,
	Germany
	Invited Colloquium, Lund Observatory, Sweden
2014	Invited Colloquium, Dep of Astrophysics, California Institute for Technology, Pasadena, CA, USA
	Invited Colloquium, UC Berkeley, Dep. of astrophysics, CA, USA
	Invited Colloquium, UC Los Angeles, Dep. of astrophysics, CA, USA
	Invited Colloquium, UC Riverside, Dep. of astrophysics, CA, USA
	Invited Seminar, University of Birmingham, Dep. of astrophysics, UK
	Invited Colloquium, University of Warsaw, Poland
	Invited Colloquium, Monash University, Melbourne, Australia
	Invited Colloquium, American Museum of Nat History, NY, USA
	Invited Colloquium, University of Michigan, Ann Arbor, MI, USA
	Invited Colloquium, Michigan State University, Lansing, MI, USA
2013	Invited Colloquium, University of Arizona, Tucson, AZ, USA
	Invited Seminar, Anton Pannekoek Institute, University of Amsterdam, NL
	Invited Colloquium, University de Montreal, Canada
	Invited Colloquium, University of Florida Gainesville, FL, USA
	Invited Colloquium, University of Maryland, College Park, MD, USA
2012	Invited Seminar, Canadian Institute for Theoretical Astrophysics, Toronto, Canada
2012	Invited Colloquium, Princeton University, NJ, USA, Invited Colloquium (main astrophysics colloquium)
	Invited Seminar, University of California, Berkeley, Dep of astrophysics, theory seminar, CA USA
	Invited Colloquium, Center for Cosmology and Particle Physics, NYU, NJ, USA
	Invited Colloquium, Astronomisches Rechnen-Institut, U. Heidelberg, Germany
	Invited Colloquium, University of Minnesota, MN, USA
	Invited Colloquium, Inst. d'Astrofíscia de Canarias de Canarias, Tenerife, Spain
	Invited Colloquium, University of Delaware Newark, DE, USA

OBSERVING TIME AND ASSOCIATED RESEARCH FUNDING

Awarded Observing time as Principle Investigator

2016	ALMA 2016.1.01015.S,	6.6 h
	"The Extreme UV through ALMA's Eyes: a unique probe of the ionizing spectrum	n of OB Stars"
2013/2014	Hubble Space Telescope/Wide Field Camera 3 GO13446-1 & 2, 4+2 orbits	56 k\$+26 k\$
	"Siblings of Massive Stars: Extreme End of the Companion Mass Function"	
2014	Hubble Space Telescope/Fine Guidance Sensor GO13447, 1 orbit,	34 k\$*
	"Massive monsters living deep inside the Tarantula Nebula"	

Awarded Observing time as Co-Investigator

Hubble Space Telescope

2017 Dwarfs and Giants: Massive Stars in Little Dwarf Galaxies (PI Andrews), GO15093, 18 orbits "" Stars and gas in the most metal-deficient galaxies in the universe (Wofford), GO15220, 9 orbits

2016	A Definitive Test of Rotational Mixing in Massive Stars (PI Proffit), GO14673, 14 orbits
2015	Primordial Binary Fraction in Trumpler 14 (PI E Sabbi) GO14107, 11 orbits
(())	Long-Lost Companions: Binary Secondaries of Three Nearby Supernovae (PI Fox) GO14075, 9 orbits
2014	The Orion Nebula Cluster as a Paradigm of Star Formation." (PI M. Robberto) GO13826, 52 orbits
(())	Most massive overcontact binary known: on the verge of coalescence? (PI Sana), GO13806, 8 orbits
	A 3D view of massive cluster formation in the SMC. (PI Sabbi), GO13680, 5 orbits
2013	Time-Lapse Movie of the Kinematics Across the Carina Nebula (GO13390, PI N. Smith), 31 orbits
(())	LEGUS: Legacy Extra Galactic UV Survey (GO13364, PI Calzetti), 154 orbits
2012	HTTP: Hubble Tarantula Treasury Project (GO12939, Pi: E. Sabbi), 60 orbits
	Proper Motions of Massive Stars near the Galactic Center (GO12915, PI: D. Lennon), 36 orbits
(())	Westerlund 2, top to bottom: how massive star clusters form (GO13038, PI: A. Nota), 7 orbits
	Searching for prolonged star cluster formation in H alpha (GO12011, PI: Th. Puzia), 2 orbits
2011	Proper Motions of Massive Stars in 30 Doradus (GO12499, PI: D. Lennon), 30 orbits
	CCC: The Cosmic Carbon Conundrum (GO12472, PI: C. Leitherer), 29 orbits
(())	A Massive Star Census of the Starburst Cluster R136 (GO12465, PI: P. Crowther), 9 orbits
(())	Multiple populations in stellar clusters (AR12642, PI: V. Kozhurina-Platais & A. Dotter), Archival

<u>Very Large Telescope (ESO)</u>

- 2018 **ESO large program,** The demographics of stellar-mass black holes (XSHOOTER, SINFONI, PI: Jonker), 135 hrs
- 2018 The multiplicity properties of 70 early B-type stars in NGC~6231 Part II. the period range corresponding to common envelope and gravitational wave progenitors (Flames, PI: Sana), 4 hrs
- 2017 The multiplicity properties of 70 early B-type stars in NGC~6231: a mile stone towards understanding the evolution of about half of the supernovae progenitors (Flames, PI: Sana), 18.3 hrs
- 2015 Uncovering the fate of the Tarantula's B-type binaries, (Flames, PI Taylor) 31 hrs
- 2013 Tracing the star formation history of the double stage H,scii super-bubble N,44 in the LMC (FLAMES/FORS, PI Sabbi), 9.5 h
- 2012 Orbital solutions for >100 massive binaries in 30 Dor, (Flames, 090.D-0323, PI: H. Sana), 31 hrs
- 2012 Massive YSOs in the periphery of R136 (Xshooter, 090.C-0346, PI: L. Kaper), 16 hrs
- 2008 **ESO large program,** The VLT-FLAMES Tarantula Survey (FLAMES 82.D-0222, PI: C. Evans, cons. member), 94.5 hrs

Various (Chandra, ALMA, NuStar, VLA, CFHT)

- 2016 **Very Large Array (VLA)**: DDT VLA/16A-447 Probing the Sub-Parsec Environment of the Type 1b SN2016bau (PI Margutti)
- 2016 **Chandra NuSTAR**: Mapping extreme mass loss from evolved massive stars with coordinated Chandra-NuSTAR observations, proposal 18500379 (PI Margutti), 30 ks Chandra + 100ks NuSTAR
- 2014 ALMA The extreme UV through ALMA's eyes: a unique probe of the ionizing power of starbursts and SMBHs (PI Scovile) Cycle 2: 2013.1.00111.S, 6.6 h
- 2013 Chandra X-ray Observatory: T-ReX: The Tarantula Revealed by X-rays (X-ray Visionary Project 15900142, PI Townsley), 2000 Ksec
- 2012 **Canadian French Hawaiian telescope (CFHT)**, BinaMIcS: Binarity and Magnetic Interactions in various classes of stars, (ESPaDOns Large Program, PI: Alecian, involved as cons. member) 606 hrs

ORGANISATION OF (INTERNATIONAL) SCIENTIFIC MEETINGS

As primary/main organizer, Chair or CoChair

- 2015 now Colloquium Organizer Anton Pannekoek Colloquium Series, Amsterdam, NL
- 2017 Chair (shared w/ Mandel) Lorentz Center Workshop, EM signatures of BH mergers, Leiden NL
- 2017 Organizer/SOC: KITP workshop Massive Stars Santa Barbara, CA, USA
- 2015 Chair (shared w/ Sana) Lorentz Center Workshop Impact of binaries on the Universe, NL
- 2012 2013 Colloquium Organizer STScI, weekly audience ~100 people, Baltimore, MD, USA

As co-organizer / member of the Scientific Organizing Committee (SOC) or Local Organizing Comitte (LOC)

- 2019 SOC: New Era of Gravitational-Wave Physics and Astrophysics, KITP workshop, Santa Barbara, US
- 2018 SOC: Physics of Massive Stars from ZAMS to LIGO, Ensenada, Mexico

- 2018 SOC: IAU General Assembly "Binaries, Multis and Astrostatistics at the Crossroads", Vienna, Austria 2017 SOC: Ages²: Taking stellar ages to the next power, Elba, Italy SOC: Kavli Summer Program, Astrophysics with gravitational wave detections, Copenhagen, DM 2017 2017 SOC: The Physics of evolved stars II, the role of binarity, Nice, France SOC: Impact of Binaries on Stellar Evolution, Garching, Germany 2017 SOC: From Stars to Massive stars, Gainesville, ~ 100 participants, FL, USA 2016 2016 SOC: COSPAR symposium Massive Binaries Turkey~ 30 participants, (cancelled) SOC: The dynamic Universe, Aspen, ~ 30 participants, CO, USA 2015 2015 SOC: Understanding Nebular Emission in High redshift Galaxies, ~ 50 participants Pasadena, CA, USA SOC: Binary Systems ~120 participants, Ulaan Bataar, Mongolia 2014 2014 SOC: Orion Nebula Cluster, ~50 participants Baltimore, Md, USA SOC: Massive stars from alpha to omega, ~150 participants, Rhodes, Greece 2013 SOC: 30 Doradus, ~50 participants, Baltimore, MD, USA 2012 2012 SOC: Intermediate Transients, ~40 participants, Baltimore, MD, USA LOC: Mass loss from Stars & Clusters, Lunteren, NL 2006
- 2006 LOC: Dutch Astronomy Conference, Vlieland, NL

MAJOR INTERNATIONAL COLLABORATIONS / CONSORTIA

- 2017 nowScience Case Team Working Group Compact Binaries, Science Case for 3G detectors2016 nowManagement team COST Action Network "CheTECH", Lead of Dutch participation2016Working Group member Stellar Lifecycles for X-ray Surveyor Science and Technology Definition Team2015 nowMember of LISA-NL consortium2015 nowMember of PLATO complementary science team
- 2008 now VLT-FLAMES Massive Stars Consortium: pan-European collaboration organized a large ESO spectroscopic program, PI Evans (Edinburgh, UK), ~60 members
- 2013 now LEGUS: HST Legacy Extra Galactic UV Survey collaboration organized around a Hubble Treasury imaging program PI Calzetti/Lee (Baltimore, Md), ~40 people
- 2012 now HTTP: HST Treasury data set of the Tarantula Nebula: proper motion and photometric program with the Hubble Space Telescope, ~25 members
- 2012 now BinaMIcS: Binarity and Magnetism in Stars PI Alecian (Paris, France), ~70 members

COMMISSIONS OF TRUST AND MEMBERSHIP OF SOCIETIES

- 2017/6/4 NASA Time Allocation Committee reviewer for Hubble Space Telescope
- 2014, 2015 Expert reviewer for OPTICON
- 2013 Expert Reviewer for Science and Technology Foundation Council (STFC), UK
- 2010 now Reviewer for various refereed journals including Monthly Notices of the Astronomical Society, Astronomy and Astrophysics, the Astrophysical Journal and the Astrophysical Journal Letters
- 2015 now Member of the European Astronomical Society
- 2012 now Member of the International Astronomy Union
- 2016 2017 Member of the American Physics Society
- 2010 2014 Member of the American Astronomical Society

UNIVERSITY & NATIONAL SERVICE WORK

2017 - now NOVA Research Committee (advisory committee to the board of the Netherlands Astronomy School) Organizer of the Dutch Theory Retreat 2017 2017 Chair of API MSc thesis prize committee Committee for the Van der Waals Lectureship series 2016 - now Primary Organizer/coordinator of API weekly astrophysics colloquium series 2015 - now Member of the API 2016 MSc thesis prize committee 2016 Member of the committee for joint activities UvA/VU Department of Physics and Astronomy 2015 - now 2015 - 2017 Member of the sounding board UD/UHD/TT for the dean Member of the educational advisory committee (Onderwijs Advies Comissie) at Utrecht University 2001 - 2003 Board Member of the student council of the faculty of physics and Astronomy, Utrecht University 2001 - 2002 2001 - 2002 Student Member of the Management Team of the Educational institute of the faculty, Utrecht University 1997 - 2000 President (1998-1999) and member of the student council, Geert Groote College, Deventer, NL

1998 Member of the "Sollictatie / Benoeming Advies Comissie", a comittee tasked with the selection of candidates for the position of section coordinators, Geert Groote College, Deventer, NL

- 1997-1999 Member of the Nationale Medezeggenschapsraad (representative advisory board), Stichting Carmel Stichting Carmel is the national organization that unites 50 high schools throughout the country, among which my former high school. I acted as student member in the (representative advisory board) at the national level.
- 1997-1999 Member of the "Medezeggenschapsraad" (representative advisory board), Geert Groote College, Deventer This council consisting of teachers, parents and students acted as a formal sounding board and adviced in various matters regarding any educational and management matters.

STUDENT SUPERVISION

As Primary Supervisor

Postdoctoral Researchers and Fellows and Associates (2)

Starting 2018	Athira Menon, postdoctoral researcher (arriving fall 2018)
Starting 2018	Stephen Justham, associate researcher (arriving june 2018)
2017– now	Robert Farmer, postdoctoral researcher
2016– now	Silvia Toonen, independent postdoctoral fellow, VENI fellowship

PhD students (4)

- 2017 now Eva Laplace, PhD students
- 2015 now Mathieu Renzo, PhD student
- 2014 now Ylva Götberg, PhD student, graduating 2018, has been offered a prize postdoctoral fellowship
- 2014 now Emanouil Zapartas, PhD student, graduating 2018

MSc Students (9)

- 2017 now Karel Temmink, MSc student (w/Toonen)
- 2017 now David Hendriks, MSc student
- 2017 now Floor Broekgaarden, MSc student
- 2016 now Walter van Rossem, MSc student
- 2016 2017 Louise Edstam, MSc student
- 2015 2016 Coen Neijssel, MSc student
- 2015 2016 Ruben Boots, MSc student
- 2014 2015 Abel Schootemeijer, MSc student
- 2013 2014 Emanouil Zapartas, MSc student

BSc Students (9)

- 2018, 2017 Thomas Dodds, BSc student
- 2016 Floor Broekgaarden, BSc student
- 2016 Max Briel, BSc student
- 2015 Timonthy Mans, undergraduate project
- 2015 Jur Haartman, undergraduate project
- 2009 Adrian Hamers, BSc student
- 2008 Mark Verkoulen, BSc student
- 2007 Michiel Cottaar, BSc student

Former students that continued were awardee fellowships or continued in academic positions:

- 2018 Y. Götberg, has been offered a Carnegie Postdoctoral Fellowship
- 2017 M. Renzo (KITP Santa Barabara, CA, 6 month Graduate student fellowship)
- 2015 C. van Neijssel (PhD Birmingham)
- 2014 A. Schootemeijer (PhD Bonn)
- 2014 N. Grin, co-supervisor (PhD Bonn)
- 2013 E. Zapartas (PhD Amsterdam, continued in my group)
- 2010 A. Hamers (PhD in Leiden, Postdoctoral fellow at IAS Princeton)
- 2009 M. Cottaar (PhD at ETH in Zurich, Postdoc at Oxford University)

Host/Mentor of visiting students and postdocs (short collaboration visits)

- 2018 PhD student Alejandro Vigna-Gómez
- 2018 PhD student Moritz Pleintinger
- 2016 Postdoc: Saida Caballero-Nieves, now faculty at Florida Institute for Technology, FL, USA
- 2016 Postdoc: Ehsan Moravveji, now Marie Curie Fellow in Leuven, Belgium
- 2016 PhD student: Dorrotya Szecsi, now postdoctoral fellow in Prague, Czech Republic
- 2016 PhD student: Alejandro Vigna-Gómez, now PhD student in Birmingham, UK
- 2016 PhD student: Simon Stevenson, now graduating in Birmingham, UK
- 2015 PhD student: Pablo Marchant, postdoctoral fellow at Northwestern University, USA

EXAMINATION OF GRADUATE STUDENTS

2017 PhD Examiner for T.	Wijnen (Radboud Univ. Nijmegen)
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- 2016 Reading committee & PhD Examiner for S. Repetto (Radboud Univ. Nijmegen)
- 2015 PhD Examiner for C. Abate (Radboud Univ. Nijmegen)
- 2015 PhD Examiner for R. Andrassy (Amsterdam/MPA Garching)
- 2014 PhD Examiner for O. Ramirez-Agudelo (Amsterdam)

TEACHING

2018	Computational Astrophysics (Graduate Level Course, University of Amsterdam, 6 EC) Guest lecturer, Big History, massive open online course (Non-science majors. University of Amsterdam)
2017	Computational Astrophysics (Graduate Level Course, University of Amsterdam, 6 EC)
	Lecturer, MESA (open source stellar evolutionary code) summer school, UCSB
	Guest lecturer in Open Problems in Astrophysics (Graduate level course, University of Amsterdam)
	Guest lecturer "Big History", massive open online course (Undergrad level, University of Amsterdam)
2016	Computational Astrophysics (Graduate Level Course, University of Amsterdam, 6 EC)
	Guest lecturer "Big History", massive open online course (Non-science majors. University of Amsterdam)
2015	Guest lecturer in Advanced Stellar Evolution (Graduate level course, University of Amsterdam)
	Guest lecturer in Open Problems in Astrophysics (Graduate level course, University of Amsterdam)
2003 - 2009	Teaching Assistant Advanced Stellar Evolution (Graduate level course, University of Utrecht)
	Teaching Assistant Advanced Thermal Physics (Advanced Undergrad course, University of Utrecht)
	Teaching Assistant Quantum Mechanics (Undergraduate level, University of Utrecht)
	Teaching Assistant Special Relativity, Classical Mechanics, Optics (Undergrad. Level, Univ. of Utrecht)
2005	Volunteer Teacher, Bilingual primary school in rural area in Guatemala
2001	Volunteer Teacher, Summer school Amsterdam Bijlmer, The Netherlands

PRESS RELEASES

Massive stars more common than scientist thought, Schneider et al. 2018	Science/NOVA
NuSTAR Finds New Clues to 'Chameleon Supernova, Margutti et al. 2017	NASA/JPL
ERC starting grant voor twee Nederlandse Astronomen	NOVA
Hubble Unveils Monster Stars, Crowther et al. 2016	NASA/STScI
Final Kiss of Two Stars Heading for Catastrophe, Almeida et al. 2015	ESO
Snoeihete ster ontploft binnen 1500 jaar, for Tramper et al. 2015	NOVA
Hubble's 25th birthday, a fly through the Westerlund 2 cluster, Zeidler et al. 2015	NASA
Galaxy with a glowing heart, image release LEGUS survey, for Calzetti et al. 2014	ESA/NASA
The brightest stars don't live alone, for Sana & De Mink et al., Science 2012	ESO/STScI
Seeing double in 30 Doradus, for Sabbi et al. 2012	NASA/STScI
Hubble's 22 nd anniversary image, for GO12499	NASA/STScI
Fastest rotating star found in neighboring galaxy, for Dufton et al., ApJL 2011	ESO/STScI
Utrechtse astronome onderzoekt met hubble fellowship de allerzwaarste sterren	NOVA
Dubbelsterren hoofdverdachten van vervuiling sterhopen, for de Mink et al., 2009	NOVA
Zwaar zwart gat in dubbelster M33-X7 verklaard, for de Mink et al., 2009	NOVA
NOVA = Netherlands school for astronomy, STScI = Space Telescope Science Ins	titute
	NuSTAR Finds New Clues to 'Chameleon Supernova, Margutti et al. 2017 ERC starting grant voor twee Nederlandse Astronomen Hubble Unveils Monster Stars, Crowther et al. 2016 Final Kiss of Two Stars Heading for Catastrophe, Almeida et al. 2015 Snoeihete ster ontploft binnen 1500 jaar, for Tramper et al. 2015 Hubble's 25 th birthday, a fly through the Westerlund 2 cluster, Zeidler et al. 2015 Galaxy with a glowing heart, image release LEGUS survey, for Calzetti et al. 2014 The brightest stars don't live alone, for Sana & De Mink et al., Science 2012 Seeing double in 30 Doradus, for Sabbi et al. 2012 Hubble's 22 nd anniversary image, for GO12499 Fastest rotating star found in neighboring galaxy, for Dufton et al., ApJL 2011 Utrechtse astronome onderzoekt met hubble fellowship de allerzwaarste sterren Dubbelsterren hoofdverdachten van vervuiling sterhopen, for de Mink et al., 2009

Further selection of outreach activities

- 2018 Evening lecturer on gravitational waves, PhD school for physics
- 2017 Founding member online network for women in theoretical and computational astrophysics
- 2017 Organizer Local Hack event for women
- 2016 FNWI/API speaker in beta break lecture series Spui25
- 2009 Science Museum Lecturer, Science for Children
- 2008 Popular lecture at the Youth Association for Astronomy in Utrecht, NL.
- 2007-2008 Organizer of the Dutch Astronomy Olympiad 2008
- 2005 Primary organizer of a one day Astrophysical Student Symposium, Utrecht University
- 2000-2005 Open science days and highschool visites to promote science

MEDIA APPEARANCE (INTERVIEWS, FEATURES)

(incomplete)	
2018 Jan	Interview for Volkskrant, "Obesitas in heelal: aantal sterren met overgewicht veel groter dan gedacht"
	https://www.volkskrant.nl/wetenschap/obesitas-in-heelal-aantal-sterren-met-overgewicht-veel-groter-dan-
	gedacht~a4554160/
2017 Oct	Interview for New Scientist Netherlands on gravitational waves
	https://newscientist.nl/nieuws/zwaartekrachtsgolf-botsende-neutronensterren-onthult-oorsprong-goud/
2017 Oct	Live Interview for Radio Nos op 3 on the binary neutron star merger
2017 Sep	Feature in Dutch popular scientific magazine KIJK
2017 Feb	Interview for Discovery Channel "How The Universe Works": exclusive episode on Massive Binary Stars
2017 Feb	Interview for Science Magazine in depth article or progenitors of binary black holes
2017 Feb	Interview with Quanta magazine on r-process nucleosynthesis
2016 Nov 28	Elsevier tijdschrift: featured in an outlook for 2017 by 5 promising young Dutch scientist
2016 Sept 6	Online Quanta magazine & podcast: protagonist in feature "Colliding Black Holes tell story of the
*	stars"
	https://www.quantamagazine.org/20160906-black-hole-ligo-astronomy/
2016 Aug 26	Radio interview Een Vandaag "Veel belovende Sterrenkundige in de race voor wetenschapstalent 2016"
0	http://www.nporadio1.nl/radio-eenvandaag/onderwerpen/372067-veelbelovende-sterrenkundige-in-de-
	race-voor-wetenschapstalent-2016
2016 Aug 25	Newspaper Parool: Short interview related to nomination as "wetenschapstalent 2015"
2016 July, 1	Magazine Filosofie: Featured in item over "verwondering" by Roeline Bos
	https://www.filosofie.nl/nl/artikel/45979/lezersenquete-profielen-van-verwonderaars.html
2016 March 17	BBC "Hubble spies the land of giants" featuring research on most massive stars
	http://www.bbc.com/news/science-environment-35833873
2015, Nov 25	Magazine AmsterdamScience, Interview for cover feature on 25 years of Hubble
	http://www.amsterdamscience.org/hubbles-25-th-birthday/
2015 Nov 7	Newspaper Parool: Listed as one of nine young Amsterdam academics that are making impact worldwide
2015 Oct 25	Newspaper Le Monde: Mentioned in "Deux étoiles géantes s'embrassent avant leur fin tragique"
	http://passeurdesciences.blog.lemonde.fr/2015/10/25/deux-etoiles-geantes-sembrassent-avant-leur-fin-
	tragique/
2015 Oct 21	TV CBS News: cited in "Stars locked in potentially fatal cosmic kiss"
	http://www.space.com/16767-massive-stars-companions-merge-vampire-stars.html
2015, Oct 21	Newspaper NRC: mentioned in a feature of the over contact binary
	https://www.nrc.nl/nieuws/2015/10/23/deze-sterren-slokken-elkaar-op-1551209-a170946
2015, Oct 21	TV item De Kennis van Nu: Interview
	http://dekennisvannu.nl/site/artikel/Bijzondere-dubbelster-ontdekt/7609
2015 Oct 21	Newspaper Volkskrant: Featured research "Innige zoen van ster VFTS 352 is hoe dan ook een
	doodskus"
	http://www.volkskrant.nl/wetenschap/innige-zoen-van-ster-vfts-352-is-hoe-dan-ook-een-
	<u>doodskus~a4167988/</u>
2015 Aug, 1	Magazine Libelle: 5 page personal professional feature
2015 March 4	TV NPO Wetenschap: De Hubble ruimte telescoop
	http://www.npo.nl/de-kennis-van-nu/04-03-2015/VPWON_1236022
2012, July 26	Popular Science Website space.com feature on Science Paper
	http://www.space.com/16767-massive-stars-companions-merge-vampire-stars.html
2012, July 2015	News website Daily mail mentioned in "Attack of the vampire sun"

http://www.dailymail.co.uk/sciencetech/article-2178851/Attack-vampire-sun-Astronomers-spot-binarystar-sucks-life-another.html

- 2011, Dec 20 **Podcast ScienceUpdate.com** interview about the fastest spinning star <u>http://www.scienceupdate.com/2011/12/star/</u>
- 2011, Dec 2 **News website nu.nl:** mentioned in feature on the fastest rotating star <u>http://www.nu.nl/wetenschap/2683653/snelst-draaiende-ster-ooit-ontdekt.html</u>
- 2010, April 10 Radio Interview Radio 1 journaal: live feature on Hubble fellowship and dubbelsterren
- 2010, April 9 Newspaper Volkskrant: mentioned in feature related to NASA fellowship http://www.volkskrant.nl/wetenschap/nederlandse-astronome-krijgt-beurs-voor-nasa~a982686/

Refereed publications Selma E de Mink

Generated automatically from NASA ADS database on 12th February 2018. (Papers accepted for publication very recently or submitted that do not yet appear on ADS may be missing.)

Publications Statistics

Total number of citations	3907
Total number of papers	122
Total number of refereed papers	75
Number of papers with more than 100 citations	10
Number of papers with more than 50 citations	21
Number of papers with more than 10 citations	60
Hirsch factor	31

Refereed Publications

2018 (4 refereed publications)

- (75) Smith, Götberg, <u>De Mink</u> (2018), "Extreme isolation of WN3/O3 stars and implications for their evolutionary origin as the elusive stripped binaries", Monthly Notices of the Royal Astronomical Society, Volume 475, Issue 1, p.772-782, (2 citations)
- (74) Götberg, <u>**De Mink**</u>, Groh, Kupfer, Crowther et al. and 2 further coauthors (2018), "Spectral models for binary products: Unifying Subdwarfs and Wolf-Rayet stars as a sequence of stripped-envelope stars", eprint arXiv:1802.03018, accepted for publication
- (73) Schneider, Sana, Evans, Bestenlehner, Castro et al. and 27 further coauthors incl. <u>De Mink</u> (2018),
 "An excess of massive stars in the local 30 Doradus starburst", Science, Volume 359, Issue 6371, pp. 69-71 (2018).,
- (72) Sabbi, Calzetti, Ubeda, Adamo, Cignoni et al. and 50 further coauthors incl. <u>De Mink</u> (2018), "The resolved stellar populations in the LEGUS galaxies", eprint arXiv:1801.05467, accepted for publication
- 2017 (18 refereed publications)
- (71) van den Heuvel, Portegies Zwart, <u>De Mink</u> (2017), "Forming short-period Wolf-Rayet X-ray binaries and double black holes through stable mass transfer", Monthly Notices of the Royal Astronomical Society, Volume 471, Issue 4, p.4256-4264, (8 citations)
- (70) Götberg, <u>De Mink</u>, Groh (2017), "Ionizing spectra of stars that lose their envelope through interaction with a binary companion: role of metallicity", Astronomy & Astrophysics, Volume 608, id.A11, 22 pp., (10 citations)
- (69) Peña-Guerrero, Leitherer, <u>De Mink</u>, Wofford, Kewley (2017), "Carbon Abundances in Starburst Galaxies of the Local Universe", The Astrophysical Journal, Volume 847, Issue 2, article id. 107, 30 pp. (2017).,
- (68) Marchant, Langer, Podsiadlowski, Tauris, <u>De Mink</u> et al. and 2 further coauthors (2017), "Ultraluminous X-ray sources and neutron-star-black-hole mergers from very massive close binaries at low metallicity", Astronomy & Astrophysics, Volume 604, id.A55, 34 pp., (1 citation)
- (67) Renzo, Ott, Shore, <u>De Mink</u> (2017), "Systematic survey of the effects of wind mass loss algorithms on the evolution of single massive stars", Astronomy & Astrophysics, Volume 603, id.A118, 30 pp., (9 citations)
- (66) Garland, Dufton, Evans, Crowther, Howarth et al. and 12 further coauthors incl. <u>De Mink</u> (2017), "The VLT-FLAMES Tarantula Survey. XXVII. Physical parameters of B-type main-sequence binary systems in the Tarantula nebula", Astronomy & Astrophysics, Volume 603, id.A91, 14 pp., (1 citation)

- (65) Kelly, Diego, Rodney, Kaiser, Broadhurst et al. and 40 further coauthors incl. <u>**De Mink**</u> (2017), "An individual star at redshift 1.5 extremely magnified by a galaxy-cluster lens", eprint arXiv:1706.10279, accepted for publication (4 citations)
- (64) Zapartas, <u>De Mink</u>, Van Dyk, Fox, Smith et al. and 8 further coauthors (2017), "Predicting the Presence of Companions for Stripped-envelope Supernovae: The Case of the Broad-lined Type Ic SN 2002ap", The Astrophysical Journal, Volume 842, Issue 2, article id. 125, 23 pp. (2017)., (5 citations)
- (63) Adamo, Ryon, Messa, Kim, Grasha et al. and 52 further coauthors incl. <u>De Mink</u> (2017), "Legacy ExtraGalactic UV Survey with The Hubble Space Telescope: Stellar Cluster Catalogs and First Insights Into Cluster Formation and Evolution in NGC 628", The Astrophysical Journal, Volume 841, Issue 2, article id. 131, 26 pp. (2017)., (7 citations)
- (62) Sabín-Sanjulián, Simón-Díaz, Herrero, Puls, Schneider et al. and 19 further coauthors incl. <u>De Mink</u> (2017), "The VLT-FLAMES Tarantula Survey. XXVI. Properties of the O-dwarf population in 30 Doradus", Astronomy & Astrophysics, Volume 601, id.A79, 22 pp., (5 citations)
- (61) Zapartas, <u>De Mink</u>, Izzard, Yoon, Badenes et al. and 6 further coauthors (2017), "Delay-time distribution of core-collapse supernovae with late events resulting from binary interaction", Astronomy & Astrophysics, Volume 601, id.A29, 22 pp., (19 citations)
- (60) Stevenson, Vigna-Gómez, Mandel, Barrett, Neijssel et al. and 2 further coauthors incl. <u>De Mink</u> (2017), "Formation of the first three gravitational-wave observations through isolated binary evolution", Nature Communications, Volume 8, id. 14906 (2017)., (17 citations)
- (59) <u>**De Mink**</u> & King (2017), "Electromagnetic Signals Following Stellar-mass Black Hole Mergers", The Astrophysical Journal Letters, Volume 839, Issue 1, article id. L7, 6 pp. (2017)., (12 citations)
- (58) Grin, Ramírez-Agudelo, de Koter, Sana, Puls et al. and 17 further coauthors incl. <u>De Mink</u> (2017), "The VLT-FLAMES Tarantula Survey. XXV. Surface nitrogen abundances of O-type giants and supergiants", Astronomy & Astrophysics, Volume 600, id.A82, 20 pp., (9 citations)
- (57) Bastian, Cabrera-Ziri, Niederhofer, <u>**De Mink**</u>, Georgy et al. and 4 further coauthors (2017), "A high fraction of Be stars in young massive clusters: evidence for a large population of near-critically rotating stars", Monthly Notices of the Royal Astronomical Society, Volume 465, Issue 4, p.4795-4799, (10 citations)
- (56) Margutti, Kamble, Milisavljevic, Zapartas, <u>De Mink</u> et al. and 17 further coauthors (2017), "Ejection of the Massive Hydrogen-rich Envelope Timed with the Collapse of the Stripped SN 2014C", The Astrophysical Journal, Volume 835, Issue 2, article id. 140, 18 pp. (2017)., (35 citations)
- (55) Shenar, Richardson, Sablowski, Hainich, Sana et al. and 17 further coauthors incl. <u>De Mink</u> (2017), "The Tarantula Massive Binary Monitoring. II. First SB2 orbital and spectroscopic analysis for the Wolf-Rayet binary R145", Astronomy & Astrophysics, Volume 598, id.A85, 16 pp., (6 citations)
- (54) Almeida, Sana, Taylor, Barbá, Bonanos et al. and 22 further coauthors incl. <u>De Mink</u> (2017), "The Tarantula Massive Binary Monitoring. I. Observational campaign and OB-type spectroscopic binaries", Astronomy & Astrophysics, Volume 598, id.A84, 36 pp., (12 citations)
- 2016 (8 refereed publications)
- (53) **De Mink** & Mandel (2016), "The chemically homogeneous evolutionary channel for binary black hole mergers: rates and properties of gravitational-wave events detectable by advanced LIGO", Monthly Notices of the Royal Astronomical Society, Volume 460, Issue 4, p.3545-3553, (65 citations)
- (52) Maccarone & <u>De Mink</u> (2016), "Large proper motion of the Thorne-Żytkow object candidate HV 2112 reveals its likely nature as foreground Galactic S-star", Monthly Notices of the Royal Astronomical Society: Letters, Volume 458, Issue 1, p.L1-L5, (10 citations)
- (51) Mandel & <u>De Mink</u> (2016), "Merging binary black holes formed through chemically homogeneous evolution in short-period stellar binaries", Monthly Notices of the Royal Astronomical Society, Volume 458, Issue 3, p.2634-2647, (98 citations)

- (50) Crowther, Caballero-Nieves, Bostroem, Maíz Apellániz, Schneider et al. and 15 further coauthors incl. **De Mink** (2016), "The R136 star cluster dissected with Hubble Space Telescope/STIS. I. Farultraviolet spectroscopic census and the origin of He II [] 1640 in young star clusters", Monthly Notices of the Royal Astronomical Society, Volume 458, Issue 1, p.624-659, (35 citations)
- (49) Wofford, Charlot, Bruzual, Eldridge, Calzetti et al. and 11 further coauthors incl. <u>De Mink</u> (2016), "A comprehensive comparative test of seven widely used spectral synthesis models against multi-band photometry of young massive-star clusters", Monthly Notices of the Royal Astronomical Society, Volume 457, Issue 4, p.4296-4322, (24 citations)
- (48) Van Dyk, <u>De Mink</u>, Zapartas (2016), "Constraints on the Binary Companion to the SN Ic 1994I Progenitor", The Astrophysical Journal, Volume 818, Issue 1, article id. 75, 9 pp. (2016)., (14 citations)
- (47) Niederhofer, Bastian, Kozhurina-Platais, Hilker, <u>**De Mink**</u> et al. and 3 further coauthors (2016), "Controversial age spreads from the main sequence turn-off and red clump in intermediate-age clusters in the LMC", Astronomy & Astrophysics, Volume 586, id.A148, 16 pp., (20 citations)
- (46) Sabbi, Lennon, Anderson, Cignoni, van der Marel et al. and 19 further coauthors incl. <u>De Mink</u> (2016), "Hubble Tarantula Treasury Project. III. Photometric Catalog and Resulting Constraints on the Progression of Star Formation in the 30 Doradus Region", The Astrophysical Journal Supplement Series, Volume 222, Issue 1, article id. 11, 25 pp. (2016)., (13 citations)
- 2015 (17 refereed publications)
- (45) <u>De Mink</u> & Belczynski (2015), "Merger Rates of Double Neutron Stars and Stellar Origin Black Holes: The Impact of Initial Conditions on Binary Evolution Predictions", The Astrophysical Journal, Volume 814, Issue 1, article id. 58, 13 pp. (2015)., (49 citations)
- (44) Almeida, Sana, <u>De Mink</u>, Tramper, Soszyński et al. and 13 further coauthors (2015), "Discovery of the Massive Overcontact Binary VFTS352: Evidence for Enhanced Internal Mixing", The Astrophysical Journal, Volume 812, Issue 2, article id. 102, 9 pp. (2015)., (13 citations)
- (43) Calzetti, Johnson, Adamo, Gallagher, J. S., Andrews et al. and 41 further coauthors incl. <u>De Mink</u> (2015), "The Brightest Young Star Clusters in NGC 5253.", The Astrophysical Journal, Volume 811, Issue 2, article id. 75, 26 pp. (2015)., (17 citations)
- (42) Grudzinska, Belczynski, Casares, <u>De Mink</u>, Ziolkowski et al. and 6 further coauthors (2015), "On the formation and evolution of the first Be star in a black hole binary MWC 656", Monthly Notices of the Royal Astronomical Society, Volume 452, Issue 3, p.2773-2787, (11 citations)
- (41) Zeidler, Sabbi, Nota, Grebel, Tosi et al. and 5 further coauthors incl. <u>De Mink</u> (2015), "A High-resolution Multiband Survey of Westerlund 2 with the Hubble Space Telescope. I. Is the Massive Star Cluster Double?", The Astronomical Journal, Volume 150, Issue 3, article id. 78, 23 pp. (2015)., (9 citations)
- (40) Tramper, Straal, Sanyal, Sana, de Koter et al. and 5 further coauthors incl. <u>De Mink</u> (2015), "Massive stars on the verge of exploding: the properties of oxygen sequence Wolf-Rayet stars", Astronomy & Astrophysics, Volume 581, id.A110, 16 pp., (16 citations)
- (39) Szécsi, Langer, Yoon, Sanyal, <u>De Mink</u> et al. and 2 further coauthors (2015), "Low-metallicity massive single stars with rotation. Evolutionary models applicable to I Zwicky 18", Astronomy & Astrophysics, Volume 581, id.A15, 35 pp., (39 citations)
- (38) Dunstall, Dufton, Sana, Evans, Howarth et al. and 5 further coauthors incl. <u>De Mink</u> (2015), "The VLT-FLAMES Tarantula Survey. XXII. Multiplicity properties of the B-type stars", Astronomy & Astrophysics, Volume 580, id.A93, 10 pp., (25 citations)
- (37) Ramírez-Agudelo, Sana, <u>De Mink</u>, Hénault-Brunet, de Koter et al. and 7 further coauthors (2015), "The VLT-FLAMES Tarantula Survey. XXI. Stellar spin rates of O-type spectroscopic binaries", Astronomy & Astrophysics, Volume 580, id.A92, 17 pp., (18 citations)

- (36) Correnti, Goudfrooij, Puzia, <u>De Mink</u> (2015), "New constraints on the star formation history of the star cluster NGC 1856", Monthly Notices of the Royal Astronomical Society, Volume 450, Issue 3, p.3054-3068, (21 citations)
- (35) Clark, Bartlett, Broos, Townsley, Taylor et al. and 10 further coauthors incl. <u>De Mink</u> (2015), "The VLT-FLAMES Tarantula survey. XX. The nature of the X-ray bright emission-line star VFTS 399", Astronomy & Astrophysics, Volume 579, id.A131, 12 pp., (4 citations)
- (34) Van Dyk, Lee, Anderson, Andrews, Calzetti et al. and 7 further coauthors incl. <u>De Mink</u> (2015), "LEGUS Discovery of a Light Echo Around Supernova 2012aw", The Astrophysical Journal, Volume 806, Issue 2, article id. 195, 9 pp. (2015)., (5 citations)
- (33) Schneider, Izzard, Langer, <u>De Mink</u> (2015), "Evolution of Mass Functions of Coeval Stars through Wind Mass Loss and Binary Interactions", The Astrophysical Journal, Volume 805, Issue 1, article id. 20, 20 pp. (2015)., (18 citations)
- (32) McEvoy, Dufton, Evans, Kalari, Markova et al. and 17 further coauthors incl. <u>De Mink</u> (2015), "The VLT-FLAMES Tarantula Survey. XIX. B-type supergiants: Atmospheric parameters and nitrogen abundances to investigate the role of binarity and the width of the main sequence", Astronomy & Astrophysics, Volume 575, id.A70, 20 pp., (22 citations)
- (31) Calzetti, Lee, Sabbi, Adamo, Smith et al. and 43 further coauthors incl. <u>De Mink</u> (2015), "Legacy Extragalactic UV Survey (LEGUS) With the Hubble Space Telescope. I. Survey Description", The Astronomical Journal, Volume 149, Issue 2, article id. 51, 25 pp. (2015)., (41 citations)
- (30) Evans, Kennedy, Dufton, Howarth, Walborn et al. and 12 further coauthors incl. <u>De Mink</u> (2015), "The VLT-FLAMES Tarantula Survey. XVIII. Classifications and radial velocities of the B-type stars", Astronomy & Astrophysics, Volume 574, id.A13, 40 pp., (17 citations)
- (29) Köhler, Langer, de Koter, <u>De Mink</u>, Crowther et al. and 6 further coauthors (2015), "The evolution of rotating very massive stars with LMC composition", Astronomy & Astrophysics, Volume 573, id.A71, 23 pp., (50 citations)
- 2014 (2 refereed publications)
- (28) <u>**De Mink**</u>, Sana, Langer, Izzard, Schneider (2014), "The Incidence of Stellar Mergers and Mass Gainers among Massive Stars", The Astrophysical Journal, Volume 782, Issue 1, article id. 7, 8 pp. (2014)., (104 citations)
- (27) Schneider, Izzard, <u>De Mink</u>, Langer, Stolte et al. and 5 further coauthors (2014), "Ages of Young Star Clusters, Massive Blue Stragglers, and the Upper Mass Limit of Stars: Analyzing Age-dependent Stellar Mass Functions", The Astrophysical Journal, Volume 780, Issue 2, article id. 117, 16 pp. (2014)., (69 citations)
- 2013 (9 refereed publications)
- (26) Bastian, Lamers, <u>De Mink</u>, Longmore, Goodwin et al. and 1 further coauthors (2013), "Early disc accretion as the origin of abundance anomalies in globular clusters", Monthly Notices of the Royal Astronomical Society, Volume 436, Issue 3, p.2398-2411, (154 citations)
- (25) Ramírez-Agudelo, Simón-Díaz, Sana, de Koter, Sabín-Sanjulían et al. and 13 further coauthors incl. <u>De Mink</u> (2013), "The VLT-FLAMES Tarantula Survey. XII. Rotational velocities of the single Otype stars", Astronomy & Astrophysics, Volume 560, id.A29, 16 pp., (73 citations)
- (24) Tramper, Gräfener, Hartoog, Sana, de Koter et al. and 6 further coauthors incl. <u>De Mink</u> (2013),
 "On the nature of WO stars: a quantitative analysis of the WO3 star DR1 in IC 1613", Astronomy & Astrophysics, Volume 559, id.A72, 12 pp., (16 citations)
- (23) Sabbi, Anderson, Lennon, van der Marel, Aloisi et al. and 16 further coauthors incl. <u>De Mink</u> (2013), "Hubble Tarantula Treasury Project: Unraveling Tarantula's Web. I. Observational Overview and First Results", The Astronomical Journal, Volume 146, Issue 3, article id. 53, 14 pp. (2013)., (27 citations)

- (22) Abate, Pols, Izzard, Mohamed, <u>De Mink</u> (2013), "Wind Roche-lobe overflow: Application to carbon-enhanced metal-poor stars", Astronomy & Astrophysics, Volume 552, id.A26, 12 pp., (62 citations)
- (21) <u>De Mink</u>, Langer, Izzard, Sana, de Koter (2013), "The Rotation Rates of Massive Stars: The Role of Binary Interaction through Tides, Mass Transfer, and Mergers", The Astrophysical Journal, Volume 764, Issue 2, article id. 166, 17 pp. (2013)., (158 citations)
- (20) Dufton, Langer, Dunstall, Evans, Brott et al. and 10 further coauthors incl. <u>De Mink</u> (2013), "The VLT-FLAMES Tarantula Survey. X. Evidence for a bimodal distribution of rotational velocities for the single early B-type stars", Astronomy & Astrophysics, Volume 550, id.A109, 12 pp., (43 citations)
- (19) Sana, de Koter, <u>De Mink</u>, Dunstall, Evans et al. and 12 further coauthors (2013), "The VLT-FLAMES Tarantula Survey. VIII. Multiplicity properties of the O-type star population", Astronomy & Astrophysics, Volume 550, id.A107, 22 pp., (157 citations)
- (18) Grunhut, Wade, Leutenegger, Petit, Rauw et al. and 11 further coauthors incl. <u>De Mink</u> (2013), "Discovery of a magnetic field in the rapidly rotating O-type secondary of the colliding-wind binary HD 47129 (Plaskett's star)", Monthly Notices of the Royal Astronomical Society, Volume 428, Issue 2, p.1686-1695, (39 citations)
- 2012 (3 refereed publications)
- (17) Sabbi, Lennon, Gieles, <u>De Mink</u>, Walborn et al. and 5 further coauthors (2012), "A Double Cluster at the Core of 30 Doradus", The Astrophysical Journal Letters, Volume 754, Issue 2, article id. L37, 6 pp. (2012)., (43 citations)
- (16) Sana, <u>De Mink</u>, de Koter, Langer, Evans et al. and 5 further coauthors (2012), "Binary Interaction Dominates the Evolution of Massive Stars", Science, Volume 337, Issue 6093, pp. 444- (2012)., (510 citations)
- (15) Platais, Melo, Quinn, Clem, <u>De Mink</u> et al. and 4 further coauthors (2012), "The Effects of Differential Reddening and Stellar Rotation on the Appearance of Multiple Populations in Star Clusters: The Case of Trumpler 20", The Astrophysical Journal Letters, Volume 751, Issue 1, article id. L8, 6 pp. (2012)., (22 citations)
- 2011 (7 refereed publications)
- (14) Dufton, Dunstall, Evans, Brott, Cantiello et al. and 10 further coauthors incl. <u>De Mink</u> (2011), "The VLT-FLAMES Tarantula Survey: The Fastest Rotating O-type Star and Shortest Period LMC Pulsar—Remnants of a Supernova Disrupted Binary?", The Astrophysical Journal Letters, Volume 743, Issue 1, article id. L22, 6 pp. (2011)., (39 citations)
- (13) Larsen, <u>De Mink</u>, Eldridge, Langer, Bastian et al. and 4 further coauthors (2011), "Resolved photometry of extragalactic young massive star clusters", Astronomy & Astrophysics, Volume 532, id.A147, 16 pp., (47 citations)
- (12) Taylor, Evans, Sana, Walborn, <u>De Mink</u> et al. and 20 further coauthors (2011), "The VLT-FLAMES Tarantula Survey. II. R139 revealed as a massive binary system", Astronomy & Astrophysics, Volume 530, id.L10, 5 pp., (28 citations)
- (11) Brott, Evans, Hunter, de Koter, Langer et al. and 7 further coauthors incl. <u>De Mink</u> (2011), "Rotating massive main-sequence stars. II. Simulating a population of LMC early B-type stars as a test of rotational mixing", Astronomy & Astrophysics, Volume 530, id.A116, 17 pp., (106 citations)
- (10) Brott, <u>De Mink</u>, Cantiello, Langer, de Koter et al. and 4 further coauthors (2011), "Rotating massive main-sequence stars. I. Grids of evolutionary models and isochrones", Astronomy & Astrophysics, Volume 530, id.A115, 20 pp., (323 citations)
- (9) Evans, Taylor, Hénault-Brunet, Sana, de Koter et al. and 37 further coauthors incl. <u>De Mink</u> (2011), "The VLT-FLAMES Tarantula Survey. I. Introduction and observational overview", Astronomy & Astrophysics, Volume 530, id.A108, 53 pp., (149 citations)

- (8) Claeys, <u>De Mink</u>, Pols, Eldridge, Baes (2011), "Binary progenitor models of type IIb supernovae", Astronomy & Astrophysics, Volume 528, id.A131, 17 pp., (55 citations)
- **2009** (5 refereed publications)
 - (7) <u>De Mink</u>, Pols, Langer, Izzard (2009), "Massive binaries as the source of abundance anomalies in globular clusters", Astronomy and Astrophysics, Volume 507, Issue 1, 2009, pp.L1-L4, (251 citations)
 - (6) Lugaro, Campbell, <u>De Mink</u> (2009), "The Mystery of CEMPs+r Stars and the Dual Core-Flash Neutron Superburst", Publications of the Astronomical Society of Australia, Volume 26, Issue 3, pp. 322-326., (15 citations)
 - (5) Bastian & <u>De Mink</u> (2009), "The effect of stellar rotation on colour-magnitude diagrams: on the apparent presence of multiple populations in intermediate age stellar clusters", Monthly Notices of the Royal Astronomical Society: Letters, Volume 398, Issue 1, pp. L11-L15., (95 citations)
 - (4) Glebbeek, Gaburov, <u>**De Mink**</u>, Pols, Portegies Zwart (2009), "The evolution of runaway stellar collision products", Astronomy and Astrophysics, Volume 497, Issue 1, 2009, pp.255-264, (90 citations)
 - (3) <u>De Mink</u>, Cantiello, Langer, Pols, Brott et al. and 1 further coauthors (2009), "Rotational mixing in massive binaries. Detached short-period systems", Astronomy and Astrophysics, Volume 497, Issue 1, 2009, pp.243-253, (116 citations)
- 2008 (1 refereed publication)
 - (2) Lugaro, <u>De Mink</u>, Izzard, Campbell, Karakas et al. and 6 further coauthors (2008), "Fluorine in carbon-enhanced metal-poor stars: a binary scenario", Astronomy and Astrophysics, Volume 484, Issue 3, 2008, pp.L27-L30, (28 citations)
- 2007 (1 refereed publication)
 - <u>De Mink</u>, Pols, Hilditch (2007), "Efficiency of mass transfer in massive close binaries. Tests from double-lined eclipsing binaries in the SMC", Astronomy and Astrophysics, Volume 467, Issue 3, June I 2007, pp.1181-1196, (66 citations)