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Research Positions

- Intended Sept 2014– **MacGillavry Assistant Professorship (tenure track)**
Anton Pannekoek Institute, University of Amsterdam, The Netherlands
- Aug 2013–Present **Einstein Postdoctoral Fellow & Lyman P. Spitzer Jr. Fellow**
Carnegie Observatories/Caltech, Pasadena, CA, USA Princeton University, NJ, USA
- Nov. 2010–July 2013 **Hubble Postdoctoral Fellow**
Space Telescope Science Institute (STScI) & Johns Hopkins University (JHU), Baltimore, MD, USA
- June–Oct. 2010 **Argelander Postdoctoral Fellow**
Argelander-Institut für Astronomie der Universität Bonn, Germany
- 2006–2010 **PhD Student** (2006–2010) and **Postdoctoral Researcher** (2010, April–June)
Thesis: Stellar evolution at low metallicity under the influence of binary interaction and rotation
Utrecht University, The Netherlands (NL), Advisor: Dr. O.R. Pols
- June–Sept. 2004 **Research Intern**
Thesis: The transparency of galaxies: from the ultra violet to the near infrared
Instituto d'Astrofiscia de Canarias, Tenerife, Spain, Advisor: Dr. M. Balcells

Education

- Utrecht University, The Netherlands
- 2006–2010 • PhD, Astrophysics, April 2010, *Cum Laude*
- 2000–2005 • MSc, Astrophysics, Oct. 2005, *Cum Laude*
- BSc, Physics, Oct. 2005, *Cum Laude*
- BSc, Mathematics, Sep. 2005, *Cum Laude*

Prize Fellowships, Honors and Prizes

- 2013 MacGillavry fellowship (assistant professorship, University of Amsterdam)
- 2013 NASA's Einstein fellowship, Lyman P. Spitzer Jr. Princeton Prize Fellowship.
Declined: ESO fellowship, CITA senior fellowship, Carnegie Nashman fellowship, CIERA fellowship, Gliese Fellowship, DARK cosmology center fellowship, Excellence Cluster fellowship
- 2010 NASA's Hubble fellowship. ESO fellowship (declined)
- 2005 1st prize of the "Nederlandse Astronomen Club" for scientific posters
- 2004 IAC summer fellowship covering three months internship at the Instituto d'Astrofísica de Canarias, Spain
- 2003 Scholarship to attend a summer school at Universidad Complutense, Madrid, Spain
- 2001 Two Honors for first year course work "Cum laude propedeuse" in Physics and in Mathematics
- 2001 2nd place, Dutch inter-university physics team competition, PION
- 2000 Award Dutch Science Education Association for highest grades in physics at the Geert Groote College
- 2000 Honorary mention, International Physics Olympiad, Leicester, UK & Dutch Physics Olympiad, 5th place

Selected Invited Reviews, Colloquia, Seminars, and talks

- 2009 – present *Invited Colloquia & Seminars: USC Santa Cruz (to be scheduled), Pittsburg (planned spring 2014), UCLA (planned January 2014), Michigan State University (planned April 2014), Michigan University (planned April 2014), University of Amsterdam (tenure track job talk, offer made), University of Arizona, Tucson (tenure track job talk, offered made April 2013), Université de Montréal (Feb 2013), University of Florida,*

Gainesville (Jan 2013), Canadian Institute for Theoretical Astrophysics, Toronto (Jan 2013), University of Maryland, College Park (Jan 2013), Astronomisches Rechen-Institut, Universität Heidelberg (Dec 2013), University of Minnesota, Minneapolis (Oct 2012), University of California, Berkeley (April 2012), Dep. of Astrophysical Sciences, Princeton University (March 2012), Instituto d'Astrofísica de Canarias, Tenerife (March 2012), Center for Cosmology and Particle Physics, New York University (Feb 2012), University of Delaware, Newark, De (Oct 2011), University of Amsterdam, NL (May 2009)

2009 - present *Invited Reviews & Invited Talks*: "Massive Stars: Alpha to Omega", Rhodes, Greece (June 2013), 'Modeling Dense Stellar systems', Lorentz Center Leiden, NL (Dec 2011), 'The Future of Astronomy', Northwestern University, (Sept 2011), "Building Virtual Galaxies", Joint Institute for Nuclear Astrophysics, Lansing, MI (April 2010), Review board meeting Netherlands School for Astronomy (April 2010), "Stellar Mergers", Lorentz Center (Sep 2009), European Week of Astronomy, Hatfield, UK (April 2009)

Publications

Over 50 scientific publications of which 25 in refereed journals, including Science. 10 refereed publications as first or second author. Over 700 citations; Hirsch-index: 15; 5 papers have been cited more than ~50 times, 20 papers received over 10 citations. (Source: SAO/NASA Astrophysics Data system)

Press releases

July 2012	"The brightest stars don't live alone" for Sana & De Mink et al., Science 2012	ESO/STScI
Aug 2012	"Seeing double in 30 Doradus" for Sabbi et al. ApJL 2012	NASA/STScI
April 2012	"Hubble's 22nd anniversary image" for GO 12499 (as co-I)	NASA/STScI
Dec 2011	"Fastest rotating star found in neighboring galaxy" for Dufton et al., ApJL 2011	ESO/STScI
Nov 2009	"Binaries primary suspects pollution star clusters" for de Mink et al., A&A 2009b	NOVA
March 2009	"Massive black hole in M33 X-7 explained" for de Mink et al., A&A 2009a	NOVA

NOVA = Netherlands school for astronomy, STScI = Space Telescope Science Institute

Awarded Observing time

Chandra X-ray Observatory		
2013	T-ReX: The Tarantula Revealed by X-rays (X-ray Visionary Project 15900142, PI Townsley)	2000 Ksec
Hubble Space Telescope (NASA/ESA)		
2013	The massive monsters living deep in the Tarantula nebula (GO 13477, as PI)	1 orbit
""	Siblings of Massive Stars: Extreme End of the Comp. Mass Function (GO13446, as PI)	6 orbits
""	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. KozhurinaPlatais & A. Dotter)	Archival
Very Large Telescope (ESO) & Canadian French Hawaiian telescope (CFHT)		
2012	BinaMicS: Binariness and Magnetic Interactions in various classes of stars (ESPaDONs Large Program, PI: Alecian, involved as cons. member)	606 hrs
""	Orbital solutions for >100 massive binaries in 30 Dor, (Flames, 090.D-0323, PI: H. Sana)	31 hrs
""	Massive YSOs in the periphery of R136 (Xshooter, 090.C-0346, PI: L. Kaper)	16 hrs
2008	The VLT-FLAMES Tarantula Survey (82.D-0222, PI: C. Evans, involved as cons. member)	94.5 hrs

Awarded Research Funding

2013	GO13446 (tbd) as PI , 2013	
	GO13447 (tbd) as PI , 2013	
	GO13364 (tbd) as Co-I, 2013	
	GO13390 (tbd) as Co-I, 2013	
2013	Einstein fellowship grant (as PI)	
2012	GO12939 (as Co-I)	\$384,000
	GO13038 (as Co-I)	\$46,000
	GO12915 (as Co-I)	\$117,000
	GO12011 (as Co-I)	\$59,000
2012	Netherlands Organization for Scientific Research (as Co-I, PI: O.R. Pols)	~ € 250,000
2011	GO12499 (as Co-I)	\$190,000
	GO12472 (as Co-I)	\$156,000
	AR12642 (as Co-I)	\$128,000
	GO12465 (as Co-I)	\$99,000
2010	Hubble fellowship grant (as PI)	
2006-2010	Travel grants from Joint Institute for Nuclear Astrophysics (JINA), International Astronomical Union (IAU) and European Southern Observatory (ESO)	~ \$ 3,000
2004-2010	Various research and travel grants from various Dutch (private) funding sources (Olga Konings Fonds, Kapteyn Fonds, Erasmus, Leidsch Kerkhoven Bosscha Fonds)	~ € 6,000

Teaching and Mentoring

(Co-) supervision of graduate and undergraduate students

Sept 2013 –	T. Wijnen: “Multiple populations in Glob. Clusters”, Leiden/Nijmegen Univ. (PhD student) ³
Jan. 2010 – Dec. 2012	C. Abate: “Carbon-enhanced, metal-poor stars”, Nijmegen Univ., NL, (A&A 2013, in press) ^{1,3}
Sept 2009 – Aug. 2010	J. Claeys: “Binary supernova progenitors for type IIb supernovae”, Utrecht, NL (A&A 528, 131, 2011) ^{2,3}
Sept. 2009 – Feb 2010	A. Hamers: “The properties of stellar mergers”, Utrecht, NL (BSc thesis) ^{1,2,4}
Sept. 2007 – Aug. 2008	M. Verkoulen: “The most massive binaries”, Utrecht, NL (BSc thesis) ^{1,2,4}
Jan 2007 – July 2007	M. Cottaar: “Radii of accreting stars at different metallicities”, Utrecht, NL (BSc thesis) ^{1,2,4} ¹ Formulated the research project, ² Weekly progress meetings, ³ Graduate Student, ⁴ Under grad. stud.
2007 – 2009	Teaching Assistant: Advanced Level Stellar Evolution (Development of new computer lab exercises including case studies, introduction of conceptual discussion questions)
2005	Student Assistant: support of development of new interactive lectures in undergraduate level physics (classical mechanics, optics, electrodynamics) including quizzes and computer exercises
2003 – 2006	Teaching Assistant exercise advanced undergrad level courses on Quantum Mechanics (2004) and Advanced Thermal Physics (2005, 2006) and undergrad. level Classical Mechanics and Optics (2003, 2004)
Jan. – March, 2006	Teacher Math and English as a volunteer in a remote village Cabrican, Guatemala
2001 – 2003	Education Advisory Committee, Member, Physics and Astronomy dep., Utrecht Univ.
July – Aug. 2001	Science Teacher: students w/ ethnic minority backgrounds and language deficiencies, Amsterdam, NL

Selected Outreach activities

Since 2012	Funded NASA HST Education/Public Outreach Opportunity “Star formation at your finger tips” (PI Christian): Program to create 3D tactile representations of HST images accessible to the visually impaired
Since 2012	Funded NASA HST Education/Public Outreach Opportunity “Tarantula Nebula Education and Public Outreach” (PI Sabbi): Program to develop audio e-book related to the Hubble Tarantula Treasury Project
Since 2009	Various interviews for (live) radio shows, newspapers, magazines and popular science websites including <u>US</u> : Space.com, AAAS Science Update, Physics Today, <u>Dutch</u> : National morning news radio: NOS, Teleac Radio and Radio 2, Dutch World Broadcast, Intermediair, Reformatorisch dagblad, tijdschrift Nederlandse Ver. voor Onderwijs in de Natuurwetenschappen, tijdschrift stichting Carmel
Since 2007	Various public lectures for children and adults: Jongeren Werkgroep Sterrenkunde, International year of

- astronomy, Public lecture at Utrecht Observatory, Hubble Science Briefing for museum educators
2009 Jury member of the astronomy science project competition for high-school students
2008, 2009 Volunteer master class Astronomy for Girls, Utrecht University
2007-2008 Organizer of the Dutch Astronomy Olympiad, an astrophysics competition for high-school students
2001-2007 Promoting science by giving lectures on high-schools, fairs and exhibitions

Selected Professional and Service activities

Membership of medium/large size Collaborations and Consortia

- Since 2013 T-ReX: Tarantula Revealed by X-ray (PI L. Townsley)
Since 2013 LEGUS: Legacy Extra Galactic UV Survey (PI D. Calzetti / J. Lee >40 members)
Since 2012 HTTP: Hubble Tarantula Treasury Survey (PI Sabbi, >20 members)
Since 2012 BinaMicS: Binarity and Magnetism in stars (PI E. Alecian / G. Wade, >70 members)
Since 2008 VLT-FLAMES massive stars consortium and the Tarantula Survey consortium (PI C. Evans, >40 members)

Organization of Conferences and Colloquium series

- 2013 SOC Co chair, 'Impact of binaries on the Universe', proposed as focus meeting for IAU 2015
2013 SOC member, 'Binary systems, their evolution and environments', Ulan-Batar, Mongolia, Sept 2014
2013 SOC member, workshop, 'The Orion Nebula Cluster as a paradigm for star formation', Baltimore, Md
2013 SOC member, 'From Alpha to Omega', Rhodes (principal 5 yearly meeting of the massive star comm.)
2012-2013 Scientific organizing committee of the STScI main colloquium series
2012 SOC member, workshop '30 Dor, the starburst next door', Baltimore, Md
2011 SOC member, workshop 'Intermediate Luminosity Transients', Baltimore, Md
2011 Organizer of the seminar and journal clubs of the massive stars and starbursts group at STScI
2006 LOC member, Dutch National Astronomy conference, NL
2006 LOC member, Mass loss from stars and the evolution of stellar clusters, NL
2006 Chair, SOC Astronomy Student Symposium, Utrecht University, NL

Other service and organizational activities

- Since 2011 Member of the International Astronomical Union, Member of the American Astronomical Society
Since 2009 Referee for Astronomy and Astrophysics, Astrophysical Journal Letters, Astrophysical Journal, Monthly Notices of the Royal Astronomical Society
2001-2002 Treasurer and Board member, student representatives organization, Utrecht Univ., NL
1999 Member Search committee, student member: Geert Groote College, Deventer, NL
1997-1999 Member of the Participation Council: national foundation 'Stichting Carmel College', NL
1996-2000 President (1998-1999) and board member student representatives, Geert Groote College, Deventer, NL

Publications

First and second author Refereed Publications

- “The incidence of mergers and other binary products among apparently single stars”, **S.E. de Mink**, H. Sana, N. Langer, R.G. Izzard, in prep. for ApJ Letters
- 1. “Rotation in massive main sequence stars: the role of binary interaction through tides, mass transfer and mergers”, ApJ 2013, 764, 166, **S.E. de Mink**, N. Langer, R.G. Izzard, H. Sana & A. de Koter
- 2. “Binary interaction dominates the evolution of massive stars”, *Science* 2012, 337, 444, H. Sana, **S.E. de Mink**, A. de Koter, N. Langer, C.J. Evans, M. Gieles, E. Gosset, R.G. Izzard, J.-B. Le Bouquin, F.R.N. Schneider.
- 3. “Resolved photometry of extragalactic young massive star clusters”, A&A, 532, 147, 2011, S.S. Larsen, **S.E. de Mink**, J.J. Eldridge, N. Langer, N. Bastian, A. Seth, L. J. Smith, J. Brodie, & Yu. N. Efremov.
- 4. “Rotating massive main-sequence stars. I. Grids of evolutionary models and isochrones”, A&A, 530, 115, 2011, I. Brott, **S.E. de Mink**, M. Cantiello, N. Langer, A. de Koter, C. J. Evans, I. Hunter C. Trundle & J. S. Vink.
- 5. “Binary progenitor models of type IIb supernovae”, A&A 528, 131, 2011, J.S.W. Claeys, **S. E. de Mink**, O.R. Pols, J.J. Eldridge, & M. Baes.
- 6. “Massive binaries as the source of globular cluster abundance patterns”, A&A, Letter, 507, 1, 2009, **S.E. de Mink**, O.R. Pols, N. Langer & R.G. Izzard.
- 7. “The Effect of Stellar Rotation on Colour-Magnitude Diagrams: On the apparent presence of multiple populations in intermediate age stellar clusters”, MNRAS Letters 398, 2009 N. Bastian & **S.E. de Mink**.
- 8. “Rotational mixing in massive binaries: detached short-period systems”, A&A 497, 243, 2009, **S.E. de Mink**, M. Cantiello, N. Langer and O.R. Pols, I. Brott & S.-Ch Yoon.
- 9. “Fluorine in carbon-enhanced metal-poor stars: a binary scenario”, A&A Letters, 484, 27, 2008, M. Lugaro*, **S.E. de Mink***, R.G. Izzard, S.W. Campbell, A. I. Karakas, S. Cristallo, O.R. Pols, J.C. Lattanzio, O. Straniero, R. Gallino & T.C. Beers. * Shared first authorship: the first two authors contributed equally to this paper.
- 10. “Efficiency of mass transfer in massive close binaries. Tests from double-lined eclipsing binaries in the SMC”, A&A, 467, 1181, 2007, **S.E. de Mink**, O.R. Pols, and R.W. Hilditch.

Co-authored Refereed Publications

- “The effects of single and binary star evolution on the stellar mass function”, F.R.N. Schneider, R. G. Izzard, N. Langer and **S. E. de Mink**, submitted to ApJ. Sept. 2013
- "The ages of young star clusters, massive blue stragglers and the upper mass limit of stars: Analysing age dependent stellar mass functions" submitted, F.R.N. Schneider, R. G. Izzard, **S. E. de Mink**, N. Langer, A. Stolte, A. de Koter, V. V. Gvaramadze, B. Hußmann, A. Liermann and H. Sana" submitted to ApJ, Sept. 2013
- On the nature of WO stars: a quantitative analysis of the WO3 star DR1, submitted June 2013, F. Tramper, G. Graefener, O. E. Hartoog, H. Sana, A. de Koter, J. S. Vink, L.E. Ellerbroek, N. Langer, M. Garcia, L. Kaper, and **S.E. de Mink**
- 11. “Early disk accretion as the origin of abundance anomalies in globular clusters”, accepted for publ. in MNRAS 2013, N. Bastian, H.J.G.L.M. Lamers, **S. E. de Mink**, S. N. Longmore, S. P. Goodwin, M. Gieles, <http://arxiv.org/abs/1309.3566>.

12. “The VLT-FLAMES Tarantula Survey: XII. Rotational velocities of the single O-type stars”, accepted for publ. in A&A 2013, O.H. Ramirez-Agudelo, S. Simon-Diaz, H. Sana, A. de Koter, C. Sabin-Sanjulian, **S.E. de Mink**, P. L. Dufton, G. Grafener, C.J. Evans, A. Herrero, N. Langer, D.J. Lennon, J. Maiz Apellaniz, N. Markova, F. Najarro, J. Puls, W.D. Taylor, and J.S. Vink, <http://arxiv.org/abs/1309.2929>
13. E. Sabbi, J. Anderson, D. J. Lennon, R. P. Van der Marel, A. Aloisi, M. L. Boyer, M. Cignoni, G. de Marchi, **S. E. de Mink**, C. J. Evans, J. S. Gallagher III, K. Gordon, D. A. Gouliermis, E. K. Grebel, A. M. Koekemoer, S. S. Larsen, N. Panagia, J. E. Ryon, L. J. Smith, M. Tosi, D. Zaritsky, AJ 146, 53, 2013, Hubble Tarantula Treasury Project: Unraveling Tarantula's Web. I. Observational overview and first results.
14. “Wind Roche-lobe Overflow and the Formation of Carbon Enhanced Metal-poor Stars”, A&A, 552, 26, 2013, C. Abate, O. R. Pols, R. G. Izzard, S. S. Mohamed, & **S. E. de Mink**
15. “The VLT-FLAMES Tarantula Survey: Rotational velocities of the single B-type stars in the Tarantula Nebula”, A&A, 550, 109, 2012, P.L. Dufton, P.R. Dunstall, C.J. Evans, I. Brott, **S. E. de Mink**, M. Kennedy, C. McEvoy, H. A. T. Potter, O.H. Ramirez-Agudelo, H. Sana, S. Simon-Diaz & W. Taylor
16. “The VLT-FLAMES Tarantula Survey VIII. Multiplicity properties of the O-type star population”, A&A, 550, 107 2012, H. Sana, A. de Koter, **S.E. de Mink**, P.R. Dunstall, C.J. Evans, V. Hénault-Brunet, J. Maiz Apellaniz, O.H. Ramirez-Agudelo, W.D. Taylor, N.R. Walborn, J.S. Clark, P.A. Crowther, A. Herrero, M. Gieles, N. Langer, D.J. Lennon & J.S. Vink
17. “Detection of a magnetic field in the rapidly-rotating O-type secondary of the colliding-wind binary HD 47129 (Plaskett’s star)”, MNRAS 2013, 428, 1681, J. Grunhut, G.A. Wade, M. Leutenegger, V. Petit, G. Rauw, C. Neiner, F. Martins, D. Cohen, M. Gagne, R. Ignace, **S. E. de Mink**, A.F.J. Moffat, S. Owocki, M. Shultz, J. Sundqvist, & the MiMeS Collaboration
18. “A double cluster at the core of 30 Doradus”, ApJ Letters 2012, 754, L37, E. Sabbi, D.J. Lennon, M. Gieles, **S.E. de Mink**, N.R. Walborn, J. Anderson, A. Bellini, N. Panagia, R. van der Marel & J. Maiz Apellaniz
19. “The Effects of Differential Reddening and Stellar Rotation on the Appearance of Multiple Populations in Star Clusters: The Case of Trumpler 20”, ApJ Letters, 751, 8, 2012, I. Platais, C. Melo, S.N. Quinn, J.L. Clem, **S.E. de Mink**, A. Dotter, V. Kozhurina-Platais, D.W. Latham, & A. Bellini.
20. “The VLT-FLAMES Tarantula Survey: The Fastest Rotating O-type Star and Shortest Period LMC Pulsar—Remnants of a Supernova Disrupted Binary?” ApJ Letters, 743, L22, 2011, P.L. Dufton, P.R. Dunstall, C.J. Evans, I. Brott, M. Cantiello, A. de Koter, **S. E. de Mink**, M. Fraser, V. Hénault-Brunet, I.D. Howarth, N. Langer, D.J. Lennon, N. Markova, H. Sana, W.D. Taylor.
21. “The VLT-FLAMES Tarantula Survey. II. R139 revealed as a massive binary system”, A&A, 530, 10, 2011, W.D. Taylor, C.J. Evans, H. Sana, N.R. Walborn, **S. E. de Mink**, V.E. Stroud, A. Alvarez-Candal, R.H. Barbá, J. M. Bestenlehner, A.Z. Bonanos, I. Brott, P.A. Crowther, A. de Koter, K. Friedrich, G. Gräfener, V. Hénault-Brunet, A. Herrero, L. Kaper, N. Langer, D.J. Lennon, J. Maiz Apellániz, N. Markova, N. Morrell, L. Monaco, J.S. Vink.
22. “The VLT-FLAMES Tarantula Survey. I. Introduction and observational overview”, A&A 530, 108, 2011, C. J. Evans, W.D. Taylor, V. Hénault-Brunet, H. Sana, A. de Koter, S. Simón-Díaz, G. Carraro, T. Bagnoli, N. Bastian, J.M. Bestenlehner, A.Z. Bonanos, E. Bressert, I. Brott, M.A. Campbell, M. Cantiello, J.S. Clark, E. Costa, P.A. Crowther, **S. E. de Mink**, E. Doran, P.L. Dufton, P. R. Dunstall, K. Friedrich, M. Garcia, M. Gieles, G. Gräfener, A. Herrero, I.D. Howarth, R.G. Izzard, N. Langer, D.J. Lennon, J. Maiz Apellániz, N. Markova, F. Najarro, J. Puls, O.H. Ramirez, C. Sabín-Sanjulián, S.J. Smartt, V.E. Stroud, J.Th van Loon, J.S. Vink & N.R. Walborn.
23. “Rotating massive main-sequence stars. II. Simulating a population of LMC early B-type stars as a test of rotational mixing”, A&A 530, A116, 2011, I. Brott, C.J. Evans, I. Hunter, A. de Koter, N.Langer, P.L. Dufton, M. Cantiello, C. Trundle, D.J. Lennon, **S.E. de Mink**, S.-Ch. Yoon & P. Anders.

24. "The Mystery of CEMP-s + r stars and the Dual Core Flash Neutron Superburst", Publications of the Astronomical Society of Australia, 26, Issue 3, 322, 2009, M. Lugaro, S. W. Campbell & **S.E. de Mink**
25. "The evolution of runaway stellar collision products", A&A, 497, 255, 2009, E. Glebbeek, E. Gaburov, **S.E. de Mink**, O.R. Pols, & S.F. Portegies Zwart.

Conference proceedings (as first author)

26. "Binaries and their impact on (our understanding of) the evolution of massive stars", **S.E. de Mink**, Massive Stars: From α to Ω , held 10-14 June 2013 in Rhodes, Greece
27. "Challenges for understanding the evolution of massive stars: rotation, binarity and mergers", **S.E. de Mink**, I. Brott, M. Cantiello, R.G. Izzard, N. Langer, and H. Sana, 2012, ASP conference series 465, "Four Decades of Massive Star Research - A Scientific Meeting in Honor of Anthony J. Moffat"
28. "Hunting for Shooting Stars in 30 Doradus", AAS 219, 151.13, 2012, Hunting for Shooting Stars in 30 Doradus, **S.E. de Mink**, D. J. Lennon, E. Sabbi, J. Anderson, L.R. Bedin, T. Sohn, R.P. van der Marel, N.R. Walborn, N. Bastian, E. Bressert, P.A. Crowther, C.J. Evans, A. Herrero, N. Langer, I. Platais, A. de Koter, H. Sana.
29. "Binaries are the best single stars", Société Royale des Sciences de Liège ("refereed" proc.), 80, 543, 2011, **S. E. de Mink**, N. Langer, & R.G. Izzard.
30. "Fast rotating stars resulting from binary evolution will often appear to be single", IAU Symposium 272, 531, **S.E. de Mink**, N. Langer, R.G. Izzard
31. "Rotational mixing in tidally-locked, massive main-sequence binaries", Comm. In Asteroseismology, 158, 2009, **S.E. de Mink**, M. Cantiello, N. Langer and O.R. Pols. (Refereed)
32. "Massive binaries and the enrichment of the interstellar medium in globular clusters", IAU Symposium 266, "Star Clusters - Basic Galactic Building Blocks throughout Time and Space", 10-14 August 2009, Rio de Janeiro, Brazil, **S.E. de Mink**, O.R. Pols, N. Langer, and R.G. Izzard
33. "A new evolutionary scenario for the formation of massive black-hole binaries such as M33 X-7 and IC 10 X-1", 2009, proceedings of "Binaries - key to comprehension of the universe", Brno, Czech Republic, June 8-12, **S.E. de Mink**, M. Cantiello, N. Langer, O.R. Pols, and S.-Ch. Yoon
34. "Rotational mixing in close binaries", IAU Symposium, 252, 365, 2008, **S.E. de Mink**, M. Cantiello, N. Langer, S.-Ch. Yoon, I. Brott, E. Glebbeek, M. Verkoulen, and O.R. Pols
35. "Binaries at Low Metallicity: Ranges For Case A, B and C Mass Transfer", First Stars III, 990, 230, 2008, **S.E. de Mink**, O.R. Pols, and S.-C. Yoon
36. "Can Low-Metallicity Binaries Avoid Merging?", First Stars III, 990, 217, 2008, **S.E. de Mink**, M. Cottaar, and O.R. Pols
37. "Critically-rotating Stars in Binaries-An Unsolved Problem", Unsolved Problems in Stellar Physics: A Conference in Honour of Douglas Gough, 948, 321, 2007, **S.E. de Mink**, O.R. Pols, and E. Glebbeek
38. "Testing Models Of Interacting Binaries Against Observations", IAU Symposium, 240, 384, 2007, **S.E. de Mink**, and O.R. Pols
39. "Testing binary evolution at SMC metallicity", Stellar Evolution at Low Metallicity: Mass Loss, Explosions, Cosmology, 353, 91, 2006, **S.E. de Mink** and O.R. Pols

Conference proceedings continued (as co-author)

40. "The Effects of Single and Close Binary Evolution on the Stellar Mass Function", Massive Stars: From α to Ω , held 10-14 June 2013 in Rhodes, Greece, Schneider, R. N. F.; Izzard, G. R.; **de Mink, S.E.**; Langer, N.; Stolte, A., de Koter, A.; Gvaramadze, V. V.; Husmann, B.; Liermann, A.; Sana, H.
41. "Massive binary stars and self-enrichment of globular clusters", *Memorie della Societa Astronomica Italiana*, v.84, p.171, Izzard, R. G.; de Mink, S. E.; Pols, O. R.; Langer, N.; Sana, H.; de Koter, A.
42. "Multiplicity of massive O stars and evolutionary implications", 370 years of Astronomy in Utrecht, 2012, ASP conference series volume 470, 141, 2013, H. Sana, **S.E. de Mink**, A. de Koter, N. Langer, C.J. Evans, M. Gieles, E. Gosset, R.G. Izzard, J.-B. Le Bouquin, F.R.N. Schneider
43. "Gone with the wind: The elusive origin of Carbon-Enhanced Metal-Poor stars", 370 years of Astronomy in Utrecht, 2012, C. Abate, O. R. Pols, R. G. Izzard, S. S. Mohamed, and **S. E. de Mink**
44. "The elusive origin of Carbon-Enhanced Metal-Poor stars", XII International Symposium on Nuclei in the Cosmos, August 5-12, 2012 Cairns, Australia, C. Abate, O. R. Pols, R. G. Izzard, S. S. Mohamed, and **S. E. de Mink**
45. "A New Analysis of Multiple Main-Sequence Turn-Offs in Intermediate-Age Star Clusters", AAS 220, 438.03, 2012, V. Kozhurina-Platais, A. Dotter, **S.E. de Mink**, I. Platais, P. Goudfrooij
46. "Toward Detecting Fast Moving Massive Stars around the 30 Doradus Region", AAS 220, 130.08, 2012, Platais, Imants; Sabbi, E.; Anderson, J.; Lennon, D. J.; van der Marel, R. P.; Bellini, A. J.; **de Mink, S. E.**; Sohn, S. T.; Bedin, L. R.
47. "The O stars in the VLT-FLAMES Tarantula Survey", *Journal of Physics: Conference Series*, 328, 12022 2011, de Koter, A.; Sana, H.; Evans, C. J.; Bagnoli, T.; Bastian, N.; Bestenlehner, J. M.; Bonanos, A.; Bressert, E.; Brott, I.; Cantiello, M.; Carraro, G.; Clark, S.; Crowther, P.; **de Mink, S. E.**; Doran, E.; Dufton, P.; Dunstall, P.; Garcia, M.; Gräfener, G.; Hénault-Brunet, V.; Herrero, A.; Howarth, I.; Izzard, R.; Köhler, K.; Langer, N.; Lennon, D.; Maíz Apellániz, J.; Markova, N.; Najarro, P.; Puls, J.; Ramirez, O.; Sabín-Sanjulián, C.; Simón-Díaz, S.; Smartt, S.; Stroud, V.; van Loon, J. Th; Taylor, W.; Vink, J. S.
48. "The VLT-FLAMES Tarantula Survey", *The Messenger*, 145, 33, 2011, Evans, C.; Taylor, W.; Sana, H.; Hénault-Brunet, V.; Bagnoli, T.; Bastian, N.; Bestenlehner, J.; Bonanos, A.; Bressert, E.; Brott, I.; Campbell, M.; Cantiello, M.; Carraro, G.; Clark, S.; Costa, E.; Crowther, P.; de Koter, A.; **de Mink, S. E.**; Doran, E.; Dufton, P.; Dunstall, P.; Garcia, M.; Gieles, M.; Gräfener, G.; Herrero, A.; Howarth, I.; Izzard, R.; Köhler, K.; Langer, N.; Lennon, D.; Maíz Apellániz, J.; Markova, N.; Najarro, P.; Puls, J.; Ramirez, O.; Sabín-Sanjulián, C.; Simón-Díaz, S.; Smartt, S.; Stroud, V.; van Loon, J.; Vink, J. S.; Walborn, N.
49. "How did Carbon-Enhanced Metal-Poor Stars form?" ASP Conference Proceedings, 447, 81 2011, Abate, C.; Pols, O. R.; Izzard, R. G.; Mohamed, S.; de Mink, S. E.
50. "The VLT-FLAMES Tarantula survey", *IAU Symposium 272*, 296, 2011, Lennon, Daniel J.; Evans, Christopher J.; Bastian, Nate; Beletsky, Yuri; Brott, Ines; Cantiello, Matteo; Carraro, Giovanni; Clark, J. Simon; Crowther, Paul A.; de Koter, Alex; **de Mink, Selma E.**; Dufton, Philip L.; Dunstall, Paul; Gieles, Mark; Gräfener, Goetz; Hénault-Brunet, Vincent; Herrero, Artemio; Howarth, Ian D.; Langer, Norbert; Maíz Apellániz, Jesús; Markova, Nevena; Najarro, F. Paco; Puls, Joachim; Sana, Hugues; Simón-Díaz, Sergio; Smartt, Stephen J.; Stroud, Vanessa E.; Taylor, William D.; van Loon, Jacco T.; Vink, Jorick S.; Walborn, Nolan R.
51. "The VLT-FLAMES Tarantula Survey", *Société Royale des Sciences de Liège, Bulletin*, 80, 430, 2011, Taylor, W. D.; Evans, C. J.; Hénault-Brunet, V.; Bastian, N.; Beletsky, Y.; Bestenlehner, J.; Brott, I.; Cantiello, M.; Carraro, G.; Clark, J. S.; Crowther, P. A.; de Koter, A.; **de Mink, S. E.**; Doran, E.; Dufton, P. L.; Dunstall, P.; Gieles, M.; Gräfener, G.; Herrero, A.; Howarth, I. D.; Langer, N.; Lennon, D. J.; Maíz Apellániz, J.; Markova, N.; Najarro, P.; Puls, J.; Sana, H.; Simón-Díaz, S.; Smartt, S. J.; Stroud, V. E.; van Loon, J. Th.; Vink, J. S.; Walborn, N. R.

52. "The VLT-FLAMES Tarantula Survey", *Bulgarian Astronomical Journal*, Vol. 15, p. 29, 2011, Markova, N.; Evans, C. J.; Bastian, N.; Beletsky, Y.; Bestenlehner, J.; Brott, I.; Cantiello, M.; Carraro, G.; Clark, J. S.; Crowther, P. A.; de Koter, A.; **de Mink, S. E.**; Doran, E.; Dufton, P. L.; Dunstall, P.; Gieles, M.; Gräefener, G.; Henault-Brunet, V.; Herrero, A.; Howarth, I. D.; Langer, N.; Lennon, D. J.; Maíz Appellániz, J.; Najarro, F.; Puls, J.; Sana, H.; Simón-Díaz, S.; Smartt, S. J.; Stroud, V. E.; Taylor, W. D.; van Loon, J. Th.; Vink, J. S.; Walborn, N. R.
53. "Rotation and Massive Close Binary Evolution", *IAU Symposium*, 250, 167, 2008, N. Langer, M. Cantiello, S.-C. Yoon, I. Hunter, I. Brott, D. Lennon, **S.E. de Mink**, and M. Verheijdt
54. "The VLT-FLAMES Tarantula Survey", *IAU Symposium 266 "Star Clusters - Basic Galactic Building Blocks Throughout Time and Space"*, Rio de Janeiro, Brazil, August 2009, arXiv:0909.1652, C.J. Evans, N. Bastian, Y. Beletsky, I. Brott, M. Cantiello, J.S. Clark, P.A. Crowther, A. de Koter, **S.E. de Mink**, P.L. Dufton, P. Dunstall, M. Gieles, G. Graefener, V. Henault-Brunet, A. Herrero, I.D. Howarth, N. Langer, D.J. Lennon, J. Maiz-Apellaniz, N. Markova, F. Najarro, J. Puls, H. Sana, S. Simon-Diaz, S.J. Smartt, V.E. Stroud, W.D. Taylor, C. Trundle, J.T. van Loon, J.S. Vink, and N.R. Walborn
55. "Modelling the evolution and nucleosynthesis of carbon-enhanced metal-poor stars", *IAU Symposium*, 252, 383, 2008, arXiv:0808.2722, O.R. Pols, R.G. Izzard, M. Lugaro, and **S.E. de Mink**