Personal details

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- Languages: German (native), English (fluent), Spanish (fluent), Dutch (basics)

Academic background

- 2021-current ESO fellow, European Southern Observatory, Garching, Germany
- 2017-2021 PhD student, Institute of Astronomy, KU Leuven, Belgium
  Thesis title: "*Observational imprints of binary evolution on B- and Be-star populations*"
- 2015-2017 Student job, Max-Planck Institute for Extraterrestrial Physics, Munich, Germany
- 2015-2017 M.Sc. Nuclear, Particle & Astrophysics, Technical University of Munich
  Thesis title: "*Interaction between massive stars and the interstellar medium*"
- 2011-2015 B.Sc. Physics, Technical University of Munich, Germany
  including two semesters ERASMUS at the Universidad Complutense de Madrid, Spain

Prizes and awards

- 2022 Springer Thesis Award
  Publication of my PhD thesis as a monograph in the Springer thesis series for 'Outstanding PhD Research'
- 2018 IAU Travel Grant
  Travel grant for the meeting IAUS351 in Bologna, Italy (250 EUR)

Successful observing proposals

- 2022 8 hours at VLTI/GRAVITY (PI) + over 50 hours at other VLT instruments (Co-I)
- 2021 30 hours at VLT/MUSE (PI) + 64 hours at other VLT instruments (Co-I)
  183 hours at Mercator/HERMES (PI)
- 2020 52 hours at VLTI/GRAVITY (Co-I) + 2 hours VLT/MUSE (Co-I)
  195 hours at Mercator/HERMES + 125 hours (Co-I)
- 2019 3 hours at VLT/UVES (PI)
  219 hours at Mercator/HERMES + 243 hours (Co-I)
- 2018 3 hours at VLT/MUSE and 5 hours at VLT/UVES (PI)
  127 hours at Mercator/HERMES (Co-I)
- 2017 76 hours at Mercator/HERMES (Co-I)
- 2016 4 hours VLT/MUSE
  2 hours APEX/LABOCA (PI)
- 2015 40 hours at MPG/ESO-2.2m telescope/FEROS (PI)
  2 hours at VLT/MUSE (Co-I)

Observing experience

- 2020 KU Leuven Mercator telescope, 10 nights (remotely due to Covid-19)
- 2019 KU Leuven Mercator telescope, 20 nights
- 2018 KU Leuven Mercator telescope, 10 nights
- 2016 MPG/ESO-2.2m telescope, 12 nights
- 2015 MPG/ESO-2.2m telescope, 9 nights

Conferences and workshops

- Nov 2022 IMBASE 2022: The Impact of Binaries on Stellar Evolution (Munich, Germany)
  Invited talk: "*Multiplicity properties of massive star populations*"
- Nov 2022 4-week MIAPP workshop: The fundamental role of stellar multiplicity in stellar dynamics and evolution
  Discussion session: "*The possible binary origin of classical Be stars*"
- May 2022 IAUS 361: Massive stars near and far (Ballyconnal, Ireland)
  Poster: "*Near and far: a hunt for binary interaction products*"
- Oct 2021 sdOB workshop (Max-Planck Institute for Astrophysics, Garching, Germany)
  Talk: "*The possible binary origin of classical Be stars and their connection to subdwarfs*"
- Jul 2021 European Week of Astronomy 2021 (virtual)
  Invited talk: "*On the origin of classical Be stars and the nature of exotic Be binary systems*"
- Jul 2020 MOBSTER-1 Conference (virtual)
  Contributed talk: "*On the binary origin of Be stars and the nature of exotic Be binary systems*"
- Jun 2020 European Week of Astronomy 2020 (virtual)
  Contributed talk: "*Hunting for post-interaction stars: A MUSE adaptive optics view of the SMC cluster NGC 330*"
- Jun 2019 European Week of Astronomy 2019 (Lyon, France)
  Contributed talk: "*Hunting for binary interaction products in the SMC cluster NGC 330 with MUSE*"
- May 2019 IAUS351: Star Clusters from the Milky Way to the Early Universe (Bologna, Italy)
  Poster: "*A MUSE view of the massive star population in the SMC cluster NGC 330*"
- Nov 2018 Massive stars and supernovae (Bariloche, Argentina)
  Contributed Talk: "*A MUSE adaptive optics view of the SMC cluster NGC 330*"
- Apr 2018 11th annual meeting of the VFTS collaboration (La Laguna, Spain)
  Talk: "*IR nebulae around massive stars as indicators for binary interactions*"
- Jul 2017 The impact of binaries on stellar evolution (Munich, Germany)
  Poster: "*Interactions between massive stars and the interstellar medium*"

Seminars

- May 2022 — Stellar Group Meeting (Observatory of Geneva, Switzerland, virtual)
  Talk: "On the possible binary origin of Be stars and the nature of exotic Be binaries"
- Nov 2021 — SESTAS Meeting (Max-Planck Institute for Astrophysics, Garching, Germany)
  Talk: "*Dissecting the core of the SMC cluster NGC 330 with MUSE*"
- Jul 2021 — IAU Working Group on Active B Stars Talk series (virtual)
  Talk: "*On the possible binary origin of classical Be stars*"
- Jul 2021 — Sheffield Astronomy Seminar (University of Sheffield, UK, virtual)
  Talk: "*On the binary origin of classical Be stars*"
- May 2021 — SeBa and binary stellar evolution meeting (virtual)
  Talk: "*On the binary origin of Be stars and the nature of exotic Be binary systems*"
- Jun 2021 — Journal Club (Liverpool John Moores University, UK, virtual)
  Talk: "*The young massive SMC cluster NGC 330 seen by MUSE*"
- Feb 2021 — Massive Star meeting (Anton-Pannekoek Institute, The Netherlands, virtual)
  Talk: "*A MUSE adaptive optics view of NGC 330: Hunting for post-interaction binaries*"
- Jan 2021 — BigBoom meeting (University of Arizona, US, virtual)
  Talk: "*On the binary origin of Be stars and the nature of exotic Be binary systems*"
- Jul 2020 — BinCosmos meeting (Harvard University, US, virtual)
  Talk: "*On the binary origin of Be stars and the nature of exotic Be binary systems*"
- Jul 2020 — Potsdam Zoominar (Potsdam University, Germany, virtual)
  Talk: "*A MUSE adaptive optics view of NGC 330: Hunting for post-interaction stars*"
- Jun 2020 — Compact Objects Meeting (Flatiron Institute New York, US, virtual)
  Talk: "*Is HR 6819 a triple system containing a black hole? An alternative explanation*"
- Apr 2019 — Institute of Astronomy Seminar Series (KU Leuven, Belgium)
  Talk: "*The core of NGC 330 seen with MUSE*"

Teaching and supervision

- Nov 2022 — lecturer at the 1-week ERASMUS+ Summer School on "*Eclipsing Binaries and Asteroseismology*", held in La Palma, Spain
- July 2022 — supervision of a 6-week research project in the context of the ESO Summer Research Programme 2022
- Fall 2020 — supervision of a one-year Master thesis at KU Leuven with Dr. D.M. Bowman
- Fall 2019 — supervision of a ten-week research project for Master students at KU Leuven with Dr. T. Shenar
- Spring 2019 — teaching assistant for the course "*High Energy Astrophysics*" at KU Leuven
- Fall 2018 — supervision of a ten-week research project for Bachelor students at KU Leuven with Dr. M. Abdul-Masih
- Spring 2018 — supervision of a one-week project with a high-school student at KU Leuven

Organizational experience and community service

- Spring 2022 subject-matter expert reviewer in a NASA peer review
- Spring 2022 assistant organizer of the ESO Summer Research Programme 2022
- 2022-current Member of the ESO Harassment Investigation Panel
- Dec 2021 selection committee for the "ESO *Hypatia* colloquium 2022"
- 2021-current scientific referee for ApJ and MNRAS
- 2019-2021 organizer of a weekly PhD meeting at the Institute of Astronomy, KU Leuven

Public outreach

- 2022
  - several virtual "*Skype a Scientist*" sessions around the world
  - co-organizer of the "*Pint of Science*" festival Munich, Germany
- 2021
  - "*Science Figured Out*" – 2min video pitch
  - video contribution to the exhibition "*To the Edge of Time*", Leuven, Belgium
  - virtual talk to German high-school class (12th grade)
  - several virtual "*Skype a Scientist*" sessions around the world
- 2020
  - several virtual "*Skype a Scientist*" sessions around the world
  - "*Couch of Science*" virtual outreach talk on youtube
- 2019
  - talk in a bar in the context of the "*Pint of Science*" festival
  - 2-h lecture about Stellar Clusters for the Astronomy Summer School Leuven
- 2018
  - "*Day of Sciences*" at KU Leuven, KU Leuven Kids University
  - High-school visits at the Institute of Astronomy, KU Leuven

Publication List

First Author

1 **Bodensteiner** & Heida, Abdul-Masih, Baade, et al., 2022, Msngr, 186, 3
Detecting Stripped Stars While Searching for Quiescent Black Holes

2 **Bodensteiner**, Sana, Wang et al. 2021, A&A 652, A70
MUSE observations of the young massive SMC cluster NGC 330. II. Multiplicity properties of the massive star population

3 **Bodensteiner**, Shenar, Mahy et al., 2020, A&A, 641, A43
Is HR 6819 a triple system containing a black hole? - An alternative explanation

4 **Bodensteiner**, Shenar, Sana, 2020, A&A, 641, A42
On the lack of main-sequence companions to Be stars

5 **Bodensteiner**, Sana, Mahy et al. 2020, A&A 634, A51
MUSE observations of the young massive SMC cluster NGC 330. I. Observations and stellar content

6 **Bodensteiner**, Baade, Greiner, Langer 2018, A&A 618, 110
IR nebulae around bright massive stars as indicators for binary interactions

Refereed Co-Author

1 Banyard, Mahy, Sana, **Bodensteiner** et al. 2022, A&A in press
Searching for compact objects in the single-lined spectroscopic binaries of the young Galactic cluster NGC 6231

2 Shenar, Sana, Mahy, ..., **Bodensteiner** et al. 2022, Nature Astronomy, 6, 1085
An X-ray quiet black hole born with a negligible kick in a massive binary within the Large Magellanic Cloud

3 Mahy, Sana, Shenar, ..., **Bodensteiner** et al. 2022, A&A, 664, A159
Identifying quiescent compact objects in massive Galactic single-lined spectroscopic binaries

4 Frost, **Bodensteiner**, Rivinius et al. 2022, A&A 659, L3
HR 6819 is a binary system with no black hole – Revisiting the source with infrared interferometry and optical integral field spectroscopy

5 Hennicker, Kee, Shenar, **Bodensteiner**, et al. 2022, A&A 660, A17
Binary-object spectral-synthesis in 3D (BOSS-3D) - Modelling H-alpha emission in the enigmatic multiple system LB-1

6 Wang, Langer, Schootemeijer, ..., **Bodensteiner** et al. 2021, Nature Astronomy 6, 480
Stellar mergers as the origin of the blue main-sequence band in young star clusters

7 Rainot, Reggiani, Sana, **Bodensteiner**, Absil 2021, A&A 658, A198
The Carina High-Contrast Imaging Project for massive Stars (CHIPS) II. O stars in Trumpler 14

8 Pavlovski, Hummel, Tkachenko, ..., Bodensteiner et al. 2021, A&A 658, A92
Dynamical parallax, physical parameters and evolutionary status of the components of the bright eclipsing binary α Draconis

9 Mehner, Janssens, Agliozzo, ..., Bodensteiner et al. 2021, A&A, 655, A33
LBV phenomenon and binarity: The environment of HR Car

10 Banyard, Sana, Mahy, **Bodensteiner** et al. 2021, A&A, 658, 69
The observed multiplicity properties of B-type stars in the Galactic young open cluster NGC 6231

11 Gebreurs, Straumit, Tkachenko, ..., **Bodensteiner**, A&A, 650, A151
A homogeneous spectroscopic analysis of a Kepler legacy sample of dwarfs for gravity-mode asteroseismology

12 Janssens, Shenar, Mahy, Marchant, Sana, **Bodensteiner**, 2020, A&A, 646, 33
BAT99 126: a Wolf-Rayet multiple system in the Large Magellanic Cloud hosting a massive near-contact binary

13 Rainot, Sana, Reggiani, **Bodensteiner** et al. 2020, A&A, 640, A15
The Carina High-Contrast Imaging Project for massive Stars (CHIPS) I. Methodology and proof of concept on QZ Car (= HD93206)

14 Shenar, **Bodensteiner**, Abdul-Masih et al. 2020, A&A, 639, L6
The hidden companion in LB-1 unveiled by spectral disentangling

15 Langer, Schürrmann, Stoll, ... , **Bodensteiner** et al. 2020, A&A 638, A39
Properties of OB star-black hole systems derived from detailed binary evolution models

16 Abdul-Masih, Banyard, **Bodensteiner**, 2020, Nature 580, 7805
No signature of the orbital motion of a putative 70 solar mass black hole in LB-1

17 Patrick, Lennon, Evans, Sana, **Bodensteiner** et al. 2020, A&A 635, A29
The Multiplicity of the Red Supergiant Population in the Young Massive Cluster NGC 330

18 Langer, Baade, **Bodensteiner** et al. 2020, A&A 633, 15
γ Cas stars: Normal Be stars with disks impacted by the wind of a helium-star companion?

19 Kriss, Mehdipour, Kaastra, Rau, **Bodensteiner** et al. 2019, A&A 621, 12
HST/COS observations of the newly discovered obscuring outflow in NGC 3783

20 Gvaramadze, Kniazev, Bestenlehner, **Bodensteiner** et al. 2015, MNRAS 454, 219
The blue supergiant MN18 and its bipolar circumstellar nebula

Others

1 **Bodensteiner**, Knust, Schweyer, Greiner, GCN Circular Service, No. 19375, 2016
GRB 160501A: GROND observation

2 **Bodensteiner**, Schmidl, Greiner, GCN Circular Service, No. 19349, 2016
GRB 160425A: GROND observation

3 Varela, Knust, **Bodensteiner**, Greiner, GCN Circular Service, No. 17729, 2015
GRB 150423A: GROND observation