

CURRICULUM VITAE

PERSONAL INFORMATION

Name
Address

Telephone
E-Mail
Nationality
Date of birth
Core of my research
Total refereed publications
citation count, h-index

Tomer Shenar
Carolina Macgillavrylaan 624
1098 XD Amsterdam, the Netherlands
+49(0)176-72289411
T.Shenar@uva.nl
Israeli, Romanian
17. June 1986
Massive stars, with focus on binary evolution and evolved states
67
1665, 25



JOBS

- **As of Oct. 2021**
- Sep. 2018 – Sep. 2021
- Oct. 2016 – Jun. 2018

- Aug. 2013 – Sep. 2016
- Feb. 2012 – Jul. 2013

- Feb. 2011 – Jul. 2011
- Jan. 2011 – Mar. 2011
- Oct. 2007 - Dec. 2010
- Jul. 2005 - Oct. 2007

Marie Curie fellow, University of Amsterdam, NL
Postdoctoral researcher (ERC-funded), KU Leuven, Belgium
Postdoctoral researcher (DLR-funded), University of Potsdam, Germany
Research assistant and tutor, University of Potsdam, Germany
Research assistant, Leibnitz Institute for Astrophysics (AIP), Potsdam, Germany
Market researcher/data analyst, H.T.P concept, Berlin, Germany
Data analyst, Pursway, Tel Aviv, Israel
Private tutor, E-Teacher, Tel Aviv, Israel
Medic in the israeli army (Israel Defense Forces, IDF), Israel

EDUCATION

- ▷ Acquired qualification
 - Institute
 - Supervisor
 - Thesis title

 - Grade

- ▷ Acquired qualification
 - Institute
 - Thesis title
 - Grade

- ▷ Acquired qualification
 - Institute
 - Institute
 - Grade

PhD in Physics (Oct. 2013 – Oct. 2016), Defense: Jan. 2017
Institute for Physics and Astronomy, University of Potsdam
Prof. Wolf-Rainer Hamann
Comprehensive analyses of massive binaries and implications on stellar evolution
with highest honor ("summa cum laude")

MSc in Physics (Oct. 2011 – Oct. 2013)
Institute for Physics and Astronomy, University of Potsdam
Spectrum formation in expanding atmospheres of rotating stars
with highest honor ("summa cum laude")

B.Sc. in Mathematics and Physics (2006 – 2010)
Technion, Haifa, Israel (2008 - 2010)
Open University, Israel, during military service (2006 - 2007)
with great honor ("magna cum laude")

RESEARCH

▷ Research interests

Evolution of massive stars and binaries

Evolved phases of massive stars (e.g., Wolf-Rayet)
Formation of gravitational-wave progenitor systems
Hunting for X-ray dormant black holes
Stellar winds, mass-loss, clumping, mass-transfer in binaries
X-rays and magnetism in massive stars

▷ Major contributions

- Shenar+ 22, Nat. Ast. [1]
- Shenar+ 22 [2]
- Shenar+ 20a [21]
- Shenar+ 20b [26]
- Shenar+ 16-19 [29,56]
- Shenar+ 15 [63]
- Shenar+ 14 [67]

Detecting the first dormant black hole outside our Galaxy^{1 2 3}
Pioneering method for uncovering hidden stellar companions
Establishing luminosity thresholds of W-R stars at subsolar Z
Discovering of a new type of post-interaction binaries
First systematic analyses of Wolf-Rayet binaries at subsolar Z
Extending atmosphere code to the regime of O-type stars
Extending atmosphere code to the regime of rotating stars

▷ Skills

- Numerical radiative transfer in expanding stellar atmospheres
- Multi-wavelength spectroscopy (X-ray, UV, optical, IR)
- Binary star analysis (spectral disentangling + modelling)
- Spectropolarimetry and lightcurve modelling
- Data acquisition and reduction (ESO, HST)
- IT: Fortran, Python, C++, Linux, Mathematica, SQL, \LaTeX , IDL
- Experience in teaching, supervision, and mentoring

AWARDS AND THIRD-PARTY FUNDING

- Jun. 2021
- Jun. 2021
- Feb. 2021
- Oct. 2020

FWO senior postdoc fellowship, approx. **300k €**
KU Leuven Research Council award **25k €**
2yr-Marie Skłodowska-Curie fellowship as PI, **176k €**
4yr-PhD fellowship, Scientific-PI and PhD supervisor funded by the Research Foundation Flanders (FWO), approx. **115k €** (PhD candidate: MSc. Soetkin Janssens)

- Feb. 2019
- Mar. 2018
- Oct. 2017 (PhD)
- Jan. 2017 (PhD)
- Sep. 2016 (PhD)

Funding awarded through ChETEC COST action (**2k €**)
Horizon 2020 Seal of excellence
Carl-Ramsauer award, Berlin Physics Society (PGzB, **1.5k €**)
Graduated summa cum laude (PhD)
MIT research visit funded by the Chandra X-ray Center Research Visitor Program (**2k €**)

- Jul. 2014 (MSc)
- Oct. 2013 (MSc)
- Jul. 2013 (MSc)

Physics thesis award, Berlin Physics Society (PGzB) (**1k €**)
Graduated summa cum laude (MSc)
Award for outstanding achievements of international students by the German Academic Exchange Service (DAAD) (**1k €**)

- Jan. 2013 (MSc)

Awarded Richard-Winter scholarship for excellency

¹<https://edition.cnn.com/2022/07/18/world/dormant-black-hole-discovered-sc9/index.html>

²<https://www.theguardian.com/science/2022/jul/18/first-dormant-black-hole-found-outside-the-milky-way>

³<https://www.eso.org/public/news/eso2210>

- Mar. 2009, 2010 (B. Sc)
- Mar. 2008 (B. Sc)

Twice on dean's list of honors, Technion
graduate of the Open University with great honors

TEACHING

- 2022
- 2021 – now
- 2019–2021
- 2019–now
- 2020–now
- 2020–2021
- 2019–2020
- Winter semester 2021
- 2018–2020
- 2018–2020
- 2015-2016
- 2015
- 2013-2014

Guest lecturer, "Stellar evolution", Uni. Amsterdam, NL
MSc supervision, S. Luijten, Uni. Amsterdam, NL
PhD co-supervision, J. Bodensteiner, "post-interaction binaries in open clusters", KU Leuven; accepted publications [15, 16]
PhD co-supervision: K. Dsilva, "A spectroscopic multiplicity survey of Galactic Wolf-Rayet stars", KU Leuven; accepted publication [5, 17], ongoing
PhD co-supervision, S. Janssens: "Detecting single-degenerate binaries with GAIA", accepted publication [9], KU Leuven, ongoing
MSc supervision of R. Lefever: "The impact of alternative wind-velocity fields on derived stellar parameters", KU Leuven; publication in prep.
MSc supervision of S. Janssens: "A comprehensive analysis of a rare Wolf-Rayet multiple system in the Large Magellanic Cloud", KU Leuven; accepted publication [13]
Guest lecturer, "Stellar Structure and Evolution", UvA
supervisor, "Master project" course at the KU Leuven (4 MSc students)
supervisor, "BSc project" course at the KU Leuven (6 BSc students)
tutor of BSc course "Introductory course for Astrophysics part II", Uni. Potsdam, Germany
tutor of MSc course "Stars, part I", Uni. Potsdam, Germany
tutor of BSc course "Introductory course for Astrophysics part II", Uni. Potsdam, Germany

OBSERVATIONS

- ESO, period 99-108
- ESO, 2023–2028
- ESO, 2016–2021
- HST, cycles 27-28
- HST, Marcator
- HERMES, Marcator
- XMM-Newton, Chandra
- HRS/SALT

approx. 150 hr with UVES, X-SHOOTER, and GRAVITY as PI, including monitoring programme
invited to submit 4MOST proposal to observe 24000, approx. 1M fiber-hours (PIs: Shenar/Sana)
Over 200 hr as co-I (FLAMES, X-SHOOTER, MUSE, UVES)
Two proposals (STIS, COS), 32 orbits (PI: Shenar)
Over 60 orbits as co-I (STIS, COS)
Over 400 hr of spectroscopic observations as PI and co-I
Over 100 hr worth of data as co-I on various X-ray proposals
Over 100 hr worth of data as co-I

SCIENTIFIC COMMUNITY WORK

- Jun. 2023
- Aug. 2022
- Nov. 2021

PI of Lorentz Workshop "The Renaissance of black holes" (to be held in Lorentz Center, Leiden, NL)
Project leader in ASPIRE summerschool programme for students from developing countries, Uni. Amsterdam, NL)
co-I, SOC member: International Space Science Institute (ISSI) meeting (to be held in Bern, Switzerland, 2021)

- Jul. 2021 co-chair, SOC member: "Stars on the pathway of becoming gravitational-wave mergers", to be held at EAS annual meeting, Leiden, the Netherlands
- Oct. 2020-now modeling manager for JPL-proposed spectropolarimetry satellite "POLSTAR")
- Jul. 2020 SOC member of the "Magnetic OB[A] Stars with TESS" virtual conference
- Aug. 2020 Organiser of journal clubs, massive-star research group at KU Leuven (Aug. 2020 onwards)
- Jul. 2020 Organiser of e-visits at the KU Leuven virtual seminar series (Jul. 2020 onwards)
- Jul. 2020 Member of committee: Mock interviewer at the KU Leuven for FWO-fellowship interviews (Jul. 2020)
- 2019–2021 Scientific referee of 13 publications (Science, A&A, MNRAS, Galaxies) – not detailed to maintain anonymity
- 2019–2021 Member of time allocation committees (ESO, HST; not detailed to maintain anonymity)
- 2016–2021 supervision of 6 PhD and MSc theses (see "teaching")
- 2016 Member of local organizing committee (LOC), "Potsdam Astrophysical Summer School 2016: Quantitative Spectroscopy in Astrophysics", Potsdam, Germany
- 2019-2021 active participation in the "Skype a Scientist" program
- Apr. 2020 Outreach: "Pint of Science" (virtual due to COVID-19)
- 2018 Outreach: Organizer of activities in kindergartens: Introduction to our solar system, Jerusalem, Israel
- 2015–2017 Outreach: Open days at the Uni. Potsdam observatory, Uni. Potsdam, Germany
- 2012–2014 Outreach: Physics & Maths tutoring of pupils with economically disadvantaged background, Berlin, Germany

LANGUAGES

FIRST LANGUAGE
OTHER LANGUAGES

Hebrew (native)
English (fluent), German (fluent), Romanian (good),
Spanish (basic), French (basic)

PUBLICATIONS

Since 2014, **113** publications, of which **67** peer-reviewed manuscripts and **24** first-author, with a total of **1665** citations and an **h-index of 25**. Below, only peer-reviewed publications are listed.

1. **T. Shenar**, H. Sana et al. 2022, Nat. Ast. in press:
"An X-ray faint black hole born with a negligible kick in a massive binary of the Large Magellanic Cloud"
2. **T. Shenar**, H. Sana et al. 2022, A&A, in press:
"The Tarantula Massive Binary Monitoring VI: Characterisation of hidden companions in 51 single-lined O-type binaries, a flat mass-ratio distribution, and black-hole binary candidates"

3. V. Ramachandran, ..., **T. Shenar** et al. 2022, A&A, in press: "Phase-resolved spectroscopic analysis of the eclipsing black hole X-ray binary M33 X-7: System properties, accretion, and evolution"
4. J. Toalá, ..., **T. Shenar** et al. 2022, MNRAS, 514, 2269 Multiple variability time-scales of the early nitrogen-rich Wolf-Rayet star WR 7
5. L. Mahy, H. Sana, **T. Shenar** et al. 2022, A&A, in press: "Identifying quiescent compact objects in massive Galactic single-lined spectroscopic binaries"
6. M. Rickard, ..., **T. Shenar** et al., 2022, A&A, in press: "Stellar wind properties of the nearly complete sample of O stars in the low metallicity young star cluster NGC346 in the SMC galaxy"
7. S. Brands, ..., **T. Shenar** et al. 2022, A&A, 663, 36: "Identifying quiescent compact objects in massive Galactic single-lined spectroscopic binaries"
8. K. Dsilva, **T. Shenar** et al., 2022, A&A, 664, 93: "A spectroscopic multiplicity survey of Galactic Wolf-Rayet stars. II. The northern WN sequence"
9. A. Frost, ..., **T. Shenar** et al., 2022, A&A, 659, 3: "HR 6819 is a binary system with no black hole. Revisiting the source with infrared interferometry and optical integral field spectroscopy"
10. D. Pauli, ..., **T. Shenar** et al., 2021, A&A, 659, 9: "The earliest O-type eclipsing binary in the Small Magellanic Cloud, AzV 476: a comprehensive analysis reveals surprisingly low stellar masses"
11. L. Hennicker, N. D. Kee, **T. Shenar** et al., 2021, A&A, 660, 17: "Binary-object spectral-synthesis in 3D – Modelling H-alpha emission in the multiple system LB-1"
12. S. Janssens, **T. Shenar** et al. 2022, A&A, 658, 129: "Uncovering astrometric black hole binaries with massive main-sequence companions with Gaia"
13. **T. Shenar**, H. Sana et al. 2021, A&A, 650, 147: "R 144: a wind-eclipsing binary with a total mass larger than $140 M_{\odot}$ "
14. A. Gilkis, **T. Shenar** et al. 2021, MNRAS, 503.1884: "The excess of cool supergiants from contemporary stellar evolution models defies the metallicity-independent Humphreys-Davidson limit"
15. N. Richardson, ..., **T. Shenar** et al. 2021, ApJ, 908, 3: "The First Dynamical Mass Determination of a Nitrogen-rich Wolf-Rayet Star Using a Combined Visual and Spectroscopic Orbit"
16. S. Janssens, **T. Shenar** et al. 2021, A&A, 646, 33: "BAT99 126: A multiple Wolf-Rayet system in the LMC with a massive near-contact binary"
17. N. St-Louis, ..., **T. Shenar** et al. 2020, MNRAS, 497, 4448 : "An extensive spectroscopic time series of three Wolf-Rayet stars - II. A search for wind asymmetries in the dust-forming WC7 binary WR137"
18. J. Bodensteiner, **T. Shenar** et al. 2020, A&A, 641, 43: "Is HR 6819 a triple system containing a black hole?. An alternative explanation"

19. J. Bodensteiner, **T. Shenar**, and H. Sana 2020, A&A, 641, 42:
"Investigating the lack of main-sequence companions to massive Be stars"
20. K. Dsilva, **T. Shenar** et al. 2020, A&A, 641, 26:
"A spectroscopic multiplicity survey of Galactic Wolf-Rayet stars. I. The northern WC sequence"
21. **T. Shenar**, J. Bodensteiner et al. 2020, A&A, 639, 6:
"The hidden companion in LB-1 unveiled by spectral disentangling"
22. N. Langer, ..., **T. Shenar** et al. 2020, A&A, 638, 39:
"Properties of OB star-black hole systems derived from detailed binary evolution models"
23. M. Abdul-Masih, ..., **T. Shenar** et al. 2020, **Nature**, 580, 11:
"On the signature of a 70-solar-mass black hole in LB-1"
24. L. Mahy, ..., **T. Shenar** et al. 2020, A&A, 634, 119:
"The Tarantula Massive Binary Monitoring: III. Atmosphere analysis of double-lined binaries"
25. L. Mahy, ..., **T. Shenar** et al. 2020, A&A, 634, 118:
"The Tarantula Massive Binary Monitoring. IV. Double-lined photometric binaries"
26. **T. Shenar**, A. Gilkis et al. 2020, A&A, 634, 79:
"Why binary interaction does not necessarily dominate the formation of WR stars at low metallicity"
27. R. Hainich, ..., **T. Shenar** et al. 2020, A&A, 634, 49:
"The stellar and wind parameters of six prototypical HMXBs and their evolutionary status"
28. M. Abdul-Masih, ... **T. Shenar** et al. 2019, ApJ, 880,115:
"Clues on the Origin and Evolution of Massive Contact Binaries: Atmosphere Analysis of VFTS 352"
29. **T. Shenar**, D. Sablowski et al. 2019, A&A, 627, 151:
"The Wolf-Rayet binaries of the nitrogen sequence in the Large Magellanic Cloud"
30. W.-R. Hamann, ..., **T. Shenar** et al. 2019, A&A, 625, 57:
"The Galactic WN stars revisited. Impact of Gaia distances on fundamental stellar parameters"
31. V. Ramachandran, ..., **T. Shenar** et al. 2019, A&A, 625, 104:
"Testing massive star evolution, star-formation history and feedback at low metallicity: Spectroscopic analysis of OB stars in the SMC Wings "
32. B. Kubátová, ..., **T. Shenar** et al. 2019, A&A, 623, 8:
"Low-metallicity massive single stars with rotation"
33. A. Sander, ..., **T. Shenar** et al. 2019, A&A, 621, 92:
"The Galactic WC and WO stars. The impact of revised distances from Gaia DR2 and their role as massive black hole progenitors"
34. R. Hainich, V. Ramachandran, **T. Shenar** et al. 2019, A&A, 621, 85:
"PoWR grids of non-LTE model atmospheres for OB-type stars of various metallicities"
35. D. Gruner, ..., **T. Shenar** et al. 2019, A&A, 621, 63:
"The extreme O-type spectroscopic binary HD 93129A. A quantitative, multiwavelength analysis"

36. J. Toalá, ..., **T. Shenar** et al. 2019, ApJ, 869, 11:
"On the Apparent Absence of Wolf-Rayet+Neutron Star Systems: The Curious Case of WR124"
37. T. Ramiaramanantsoa, R. Ramiaramanantsoa, **T. Shenar** et al. 2018, MNRAS, 480, 972:
"A BRITE view on the massive O-type supergiant V973 Scorpii"
38. **T. Shenar**, R. Hainich et al. 2018, A&A, 616, 103:
"The Shortest-period Wolf-Rayet binary in the SMC: Part of a high-order multiple system"
39. V. Ramachandran, ..., **T. Shenar**, et al. 2018, A&A, 615, 40:
"Stellar population of the superbubble N 206 in the LMC. II. Parameters of the OB and WR stars, and the total massive star feedback"
40. T. Ramiaramanantsoa, ..., **T. Shenar** et al. 2018, ApJ, 473, 5532:
"BRITE-Constellation photometry of the early O-type supergiant ζ Puppis unveils the photospheric drivers of its small- and large-scale wind structures"
41. N. D. Richardson, ..., **T. Shenar** et al. 2017, MNRAS, 471, 2715:
"The variability of the BRITE-est Wolf-Rayet binary, γ^2 Velorum I. Photometric and spectroscopic evidence for colliding winds"
42. R. Hainich, L. M. Oskinova, **T. Shenar** et al. 2018, A&A, 609, 94:
"Observational properties of massive black hole binary progenitors"
43. S. Järvinen, ..., **T. Shenar** et al. 2017, AN, 338, 952:
"A search for spectral variability in the highly magnetized O9.7 V star HD 54879"
44. V. Ramachandran, ..., **T. Shenar**, et al. 2018, A&A, 609, 7:
"Stellar population of the superbubble N206 in the LMC I. Analysis of the Of-type stars"
45. **T. Shenar**, L. Oskinova et al. 2018, CoSka, 48, 139:
"Constraining the weak-wind problem: an XMM-HST campaign for the magnetic O9.7 V star HD 54879"
46. A. Sander, ..., **T. Shenar**, et al. 2018, A&A, 610, 60:
"Coupling hydrodynamics with comoving frame radiative transfer: II. Stellar wind stratification in the HMXB Vela X-1"
47. **T. Shenar**, L. M. Oskinova et al. 2017, A&A, 606, 91:
"A combined HST and XMM-Newton campaign for the magnetic O9.7 V star HD 54879"
48. L. M. Oskinova, ..., **T. Shenar** et al. 2017, ApJ, 845, 390:
"On the binary nature of massive blue hypergiants: high-resolution X-ray spectroscopy suggests that Cyg OB2 12 is a colliding wind binary"
49. A. Sander, ..., **T. Shenar** 2017, A&A, 603, 86:
"Coupling hydrodynamics with CMF radiative transfer. I. A unified approach for OB and WR stars"
50. M. Munoz, ..., **T. Shenar** et al. 2017, MNRAS, 467, 3105:
"HD 197406 is a massive runaway WN7ha+O5V binary at 800pc from the Galactic plane"
51. **T. Shenar**, N. D. Richardson, D. Sablowski et al. 2017, A&A, 598, 85:
"The TMBM: II. First SB2 orbital and spectroscopic analysis for the WR binary R 145"
52. Almeida, L. A. ..., **T. Shenar** et al. 2017, A&A, 589, 84:
"The TMBM I. Observational campaign and OB-type spectroscopic binaries"

53. N. D. Richardson, **T. Shenar**, O. Roy-Loubier et al. 2016, MNRS, 461, 4115:
"The CHARA Array resolves the long-period Wolf-Rayet binaries WR 137 and WR 138"
54. E. J. Aldoretta, ..., **T. Shenar** et al. 2016, MNRS, 460, 3407:
"An extensive spectroscopic time series of three Wolf-Rayet stars - I. The lifetime of large-scale structures in the wind of WR 134"
55. A. Giménez-García, **T. Shenar**, J. M. Torrejón et al. 2016, A&A, 591, 26:
"Measuring the stellar wind parameters in IGR J17544-2619 and Vela X-1 constrains the accretion physics in supergiant fast X-ray transient and classical supergiant X-ray binaries"
56. **T. Shenar**, R. Hainich, H. Todt et al. 2016, A&A, 591, 22:
"Wolf-Rayet stars in the Small Magellanic Cloud. II. Analysis of the binaries"
57. D. Huenemoerder, ..., **T. Shenar**, 2015, ApJ, 815, 29:
"Probing Wolf-Rayet Winds: Chandra/HETG X-Ray Spectra of WR 6"
58. J. M. Torrejón, ..., **T. Shenar** et al. 2015, ApJ, 810, 102:
"On the Radial Onset of Clumping in the Wind of the B0I Massive Star QV Nor"
59. R. Hainich, ..., **T. Shenar** et al. 2015 A&A, 581, 21:
"Wolf-Rayet stars in the Small Magellanic Cloud. I. Analysis of the single WN stars"
60. M. Corcoran, ..., **T. Shenar**, et al. 2015, ApJ, 809, 132:
"A coordinated X-ray and optical campaign of the nearest massive eclipsing binary, Delta Orionis Aa: I. Overview of the X-ray spectrum"
61. J. Nichols, ..., **T. Shenar** et al. 2015, ApJ, 809, 133:
"A coordinated X-ray and optical campaign of the nearest massive eclipsing binary, Delta Orionis Aa: II. Overview of the X-ray spectrum"
62. H. Pablo, ..., **T. Shenar** et al. 2015 ApJ, 809, 134:
"A coordinated X-ray and optical campaign of the nearest massive eclipsing binary, Delta Orionis Aa: III. Analysis of optical photometric and spectroscopic variations"
63. **T. Shenar**, L. Oskinova, W.-R. Hamann et al. 2015, ApJ, 809, 13:
"A coordinated X-ray and optical campaign of the nearest massive eclipsing binary, Delta Orionis Aa: IV. A multiwavelength, non-LTE spectroscopic analysis"
64. H. Todt, ..., **T. Shenar**, 2015, A&A, 579, 75:
"Potsdam Wolf-Rayet model atmosphere grids for WN stars"
65. A. Sander, **T. Shenar**, R. Hainich et al. 2015 A&A, 577, 13:
"On the consistent treatment of the hydrostatic layers of hot stellar atmospheres"
66. V. Gvaramadze, ..., **T. Shenar** et al. 2014, MNRS, 442, 929:
"Discovery of a new WR star and a candidate star cluster in the Large Magellanic Cloud with Spitzer"
67. **T. Shenar**, W-R. Hamann, H. Todt, 2014, A&A, 562, 118:
"The impact of rotation on the line profiles of Wolf-Rayet stars"

CONFERENCE CONTRIBUTIONS

I participated in over 40 international conferences and colloquia. Below, I only provide a list of invited and contributed talks.

1. Talk (invited): "Wolf-Rayet stars",
IAU massive star symposium, May 2022, Ballyconnell, Ireland (upcoming)
2. Talk (invited): "Hunting for stellar-mass black holes",
Weizmann Institute colloquium, Mar. 2022, Rehovot, Israel
3. Talk (invited): "Hunting for stellar-mass black holes",
Supernova group of I. Arcavi at U. Tel Aviv, Mar. 2022, Tel Aviv, Israel
4. Talk (invited): "Binaries across the evolutionary axis",
ISSI meeting, Dec 2021, Bern, Switzerland
5. Talk: "A new type of post-interaction Be binaries "
Be X-ray Binaries conference, Jul. 2021, Valencia, Spain (virtual)
6. Talk: "The role of winds, mixing & binaries in the formation of Wolf-Rayet stars",
EAS annual meeting, June 2021, virtual
7. Talk (invited): "The production of classical Wolf-Rayet stars at low metallicity ",
IAU massive star symposium, May 2021, virtual
8. Talk: "Very massive binaries in the Tarantula "
The VFTS meeting, Mar. 2021, virtual
9. Talk (invited): "The hot part of the Hertzsprung-Russel diagram"
at the astrophysics of the Instituto de Astrofisica (IAC) de Canarias, Mar. 2021, Tenerife, Spain
10. Talk (invited): "The hunt for Galactic black-holes"
at the astrophysics seminar of the University of Auckland, Feb. 2021, Auckland, New Zealand
11. Talk (invited): "The hunt for Galactic black-holes"
at the astrophysics seminar at the University of Tel-Aviv, Nov. 2020, Tel-Aviv, Israel
12. Talk (invited): "The hunt for Galactic black-holes"
at the astrophysics seminar at UNAM, Sep. 2020, Mexico City, Mexico
13. Talk (invited): "The hunt for Galactic black-holes"
at the astrophysics seminar at the University of Birmingham, Jul. 2020, Birmingham, UK
14. Talk (invited): "Do we understand the progenitors of black holes and neutron stars?",
weekly astrophysics seminar, Dec. 2019, University of Sheffield, England
15. Talk (invited): "Do we understand the progenitors of black holes and neutron stars?",
weekly astrophysics seminar, Dec. 2019, Armagh Observatory, Northern Ireland
16. Talk: "The formation and evolution of Wolf-Rayet stars",
at the KU Leuven institute of astrophysics (IvS) seminar, Oct. 2019, KU Leuven, Belgium
17. Talk: "The formation of Wolf-Rayet stars in the Magellanic Clouds",
at the annual meeting of the European Astronomical Society (EWASS), Jul. 2019, Lyon, France
18. Talk (invited): "The Wolf-Rayet stars in the Magellanic Clouds",
at the Oxford astrophysics colloquium, Jun. 2019, Oxford, England
19. Talk (invited): "Confronting massive-star evolution at subsolar metallicity ",
at the Argelander Institute's colloquium, Mar. 2019, Bonn, Germany

20. Talk (invited): "Mass-loss, binary interaction and the Wolf-Rayet connection", at the weekly astrophysics colloquium in Cambridge, Feb. 2019, Institute of astronomy, Cambridge, England
21. Talk (invited): "Mass-loss, binary interaction and the Wolf-Rayet connection", at the massive star seminar, Feb. 2019, University of Amsterdam, Amsterdam, Germany
22. Talk: "The formation of Wolf-Rayet stars at low metallicity", at the conference "Massive stars and supernovae", Nov. 2018, Bariloche, Argentina
23. Talk (invited): "Wolf-Rayet binaries as progenitors of high-mass X-ray binaries", at the conference "Stellar winds in wind-fed systems", Oct. 2018, Santander
24. Talk: "Constraining the X-ray formation regions in γ Cas systems", at the conference "The γ Cas phenomenon", Sep. 2018, Strasbourg, France
25. Talk: "Wolf-Rayet binaries as progenitors of high-mass X-ray binaries", at the IAU general assembly, Aug. 2018, Vienna, Austria
26. Talk (invited): "Analyses of massive multiples in the era of gravitational waves", at the "Stellar astrophysics" seminar of KU Leuven, Jun. 2018, Leuven, Belgium
27. Talk (invited): "Unsolved issues of massive stars in the era of gravitational waves", at the Royal Observatory Colloquium, Nov. 2017, Edinburgh, Scotland
28. Talk: "The WR population in the Magellanic Clouds and implications on star formation", at the Annual meeting of German Astronomical Society, Sep. 2017, Göttingen, Germany
29. Talk: "Magnetic stars as a laboratory for constraining the weak-wind problem in massive stars", at the Annual meeting of German Astronomical Society, Sep. 2017, Göttingen, Germany
30. Talk: "Using magnetic stars to constrain the weak-wind problem", at the conference "stars with a stable magnetic field", Brno, Aug. 2017, Czech Republic
31. Talk: "Mass-transfer does not dominate the formation of WR stars in the SMC", at the conference "The physics of evolved stars", Jul. 2017, Nice, France
32. Talk (invited): "The interplay between X-rays and stellar winds", at the "high energy Astrophysics" seminar, Oct. 2016, MIT, Cambridge, USA
33. Talk: "Wolf-Rayet binaries in the Magellanic Clouds: winds versus Roche lobe overflow", at the conference "Blowing in the Wind", Quy Nhon, Vietnam, Aug. 2016
34. Talk "Constraining binary effects on WR stars in the Small Magellanic Cloud", at the conference "Bridging the gap", Jun. 2016, Buckinghamshire, England
35. Talk: "Spektroskopie von Massereichen, engen Doppelsternsysteme", at the conference "Spektroskopie Tagung in Adlershof", Apr. 2016, Adlershof, Germany
36. Talk: "Ultra-luminous X-ray sources and their implications", at the astronomy seminar of the Université de Montréal, Oct. 2015, Montreal, Canada
37. Talk: "A spectral analysis of the Wolf-Rayet binaries in the Small Magellanic Cloud", at the Annual meeting of German Astronomical Society, Sep. 2015, Kiel, Germany
38. Talk: "The impact of rotation on Wolf-Rayet spectra", at the "international workshop on Wolf-Rayet stars", Jun. 2015, Potsdam, Germany
39. Talk "A comprehensive analysis of the massive multiple system Delta Orionis A", at the Annual meeting of German Astronomical Society, Sep. 2014, Bamberg, Germany

40. Talk "Wolf-Rayet Binary systems and their spectral uniqueness",
at the workshop "Spectral Disentanglement", Aug. 2014, Rio de Janeiro, Brasil
41. Talk "A very hot Wolf-Rayet star with a circular shell in the LMC",
at the workshop "Astrospheres", Dec. 2013, Leiden, Netherlands