

# CURRICULUM VITAE

## PERSONAL INFORMATION

Name  
Address  
E-Mail  
Nationality  
Date of birth  
Personal web page  
Core of my research  
Total refereed publications  
citation count, h-index

Tomer Shenar  
Kaplan 109, Tel Aviv Uni., Israel  
T.Shenar@uva.nl  
Israeli, Romanian  
17. June 1986  
www.tomershenar.com  
Massive stars, with focus on binary evolution and evolved states  
89  
2516, 29



## JOBS

- **Jan. 2024** – now
- Jun. 2023 – Dec. 2023
- Oct. 2021 – Jun. 2023
- Sep. 2018 – Sep. 2021
- Oct. 2016 – Jun. 2018
- Aug. 2013 – Sep. 2016

**Assistant professor, University of Tel Aviv, Israel**  
Group leader, Centro de Astrobiologia, Madrid, Spain  
Marie Curie fellow, University of Amsterdam, NL  
Postdoctoral researcher (ERC), KU Leuven, Belgium  
Postdoctoral researcher (DLR), University of Potsdam, DE  
Research assistant and tutor, University of Potsdam, DE

## 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 (Wolf-Rayet, Oe/Be)

Formation of gravitational-wave progenitor systems

X-ray dormant black holes

Stellar winds, mass-loss, clumping

mass-transfer in binaries

X-rays and magnetism in massive stars

### ▷ Research highlights:

- Shenar+ 23, **Science** [1]
- 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]

Uncovering the first magnetic Wolf-Rayet star<sup>1</sup>

Detecting the first dormant black hole outside our Galaxy<sup>2 3 4</sup>

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

## AWARDS AND THIRD-PARTY FUNDING

- Jul. 2023
- Jul. 2023
- Jun. 2021
- Jun. 2021
- Feb. 2021
- Oct. 2020
  
- Feb. 2019
- Mar. 2018
- Oct. 2017 (PhD)
- Jan. 2017 (PhD)
- Sep. 2016 (PhD)
  
- Jul. 2014 (MSc)
- Oct. 2013 (MSc)
- Jul. 2013 (MSc)
  
- Jan. 2013 (MSc)
- Mar. 2009, 2010 (B. Sc)
- Mar. 2008 (B. Sc)

Assistant prof. startup package  $\approx$  **1M €**

Group leader, atracción de Talento, Spain,  $\approx$  **500k €**

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)

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 €**)

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 €**)

Awarded Richard-Winter scholarship for excellency

Twice on dean's list of honors, Technion

graduate of the Open University with great honors

<sup>1</sup><https://edition.cnn.com/2023/08/17/world/stars-magnetar-scن/index.html>

<sup>2</sup><https://edition.cnn.com/2022/07/18/world/dormant-black-hole-discovered-scن/index.html>

<sup>3</sup><https://www.theguardian.com/science/2022/jul/18/first-dormant-black-hole-found-outside-the-milky-way>

<sup>4</sup><https://www.eso.org/public/news/eso2210>

## TEACHING

- Dec. 2021 + 2022
  - 2022 – 2023
  - 2021 – 2022
  - 2019–2021
  
  - 2019–2022
  
  
  - 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, F. Temming, 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, Gemrany  
tutor of MSc course "Stars, part I", Uni. Potsdam, Gemrany  
tutor of BSc course "Introductory course for Astrophysics part II", Uni. Potsdam, Gemrany

## OBSERVATIONS

- ESO, period 112
  - ESO, period 99-108
  
  - ESO, 2023–2028
  
  - ESO, 2016–2021
  - HST, cycles 27-28
  - HST, Marcator
  - HERMES, Marcator
  - XMM-Newton, Chandra
  - HRS/SALT
- 116 hr, FLAMES, Large Programme  
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" (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, **153** publications, of which **89** peer-reviewed manuscripts and **27** first-author, with a total of **2516** citations and an **h-index of 29** (Retrieved from ADS on 2 June 2024). Below, only peer-reviewed publications are listed.

1. S. Rastello, ..., **T. Shenar** et al. 2023, MNRAS, 526, 740:  
"Dynamical formation of Gaia BH1 in a young star cluster"
2. S. Saracino, ..., **T. Shenar** et al. 2023, MNRAS, 526, 299:  
"A closer look at the binary content of NGC 1850"
3. J. Villaseñor, ..., **T. Shenar** et al. 2023, MNRAS, 525, 512:  
"The B-type Binaries Characterisation Programme - II. VFTS 291: a stripped star from a recent mass transfer phase"
4. **T. Shenar**, H. Sana et al. 2023, A&A, 679, 36  
"Constraints on the multiplicity of the most massive stars known: R136 a1, a2, a3, and c"
5. A. Romagnolo, ..., **T. Shenar** et al. 2023, MNRAS, 525, 706:  
"The role of stellar expansion on the formation of gravitational wave sources"
6. J. Zak, ... , **T. Shenar** et al. 2023, MNRAS, 524, 5749:  
"Everything that glitters is not gold: V1315 Cas is not a dormant black hole"
7. S. Janssens, **T. Shenar** et al. 2023, A&A, 677, 9:  
"MWC 656 is unlikely to contain a black hole"
8. **T. Shenar**, G. A. Wade et al. 2023, **Science**, 381, 761:  
"A massive helium star with a sufficiently strong magnetic field to form a magnetar"
9. J. Villaseñor, ..., **T. Shenar** et al. 2023, A&A, in press:  
"The B-type Binaries Characterisation Programme II. VFTS 291: A stripped star from a recent mass transfer phase"
10. J. Vink, ..., **T. Shenar** et al. 2023, A&A, 675, 154:  
"X-Shooting ULLYSES: Massive stars at low metallicity. I. Project description"
11. V. Ramachandran, ..., **T. Shenar** et al. 2023, A&A, 674, 12:  
"A partially stripped massive star in a Be binary at low metallicity. A missing link towards Be X-ray binaries and double neutron star mergers"
12. G. Banyard, ..., **T. Shenar** et al. 2023, A&A, 674, 60:  
"Searching for compact objects in the single-lined spectroscopic binaries of the young Galactic cluster NGC 6231"
13. S. Saracino, **T. Shenar** et al. 2023, MNRAS, 521, 3162:  
"Updated radial velocities and new constraints on the nature of the unseen source in NGC1850 BH1"
14. D. Pauli, ..., **T. Shenar** et al. 2023, A&A, 573, 40:  
"Spectroscopic and evolutionary analyses of the binary system AzV 14 outline paths toward the WR stage at low metallicity"
15. K. Sen, ..., **T. Shenar** et al. 2023, A&A, 672, 198:  
"Reverse Algols and hydrogen-rich Wolf-Rayet stars from very massive binaries"
16. R. Lefever, A. Sander, **T. Shenar** et al. 2023, MNRAS, 521, 1374:  
"Exploring the influence of different velocity fields on Wolf-Rayet star spectra"

17. J. Janssens, **T. Shenar** et al. 2023, A&A, 670, 79:  
"Detection of single-degenerate massive binaries with Gaia: The impact of blue supergiants, triples, mass precision, and high-precision parallax requirements"
18. A. Gilkis & **T. Shenar**, 2023, MNRAS, 518, 3541:  
"Ups!... I did it again: unveiling the hidden companion in Upsilon Sagittarii, a unique binary system at a second mass transfer stage"
19. K. Dsilva, **T. Shenar** et al. 2023, A&A, 674, 88:  
"A spectroscopic multiplicity survey of Galactic Wolf-Rayet stars. III. The northern late-type nitrogen-rich sample"
20. K. Gayley, ..., **T. Shenar** et al. 2022, Ap&SS, 367, 123:  
"Understanding structure in line-driven stellar winds using ultraviolet spectropolarimetry in the time domain"
21. G. Peters, ..., **T. Shenar** et al. 2022, Ap&SS, 367, 119:  
"Ultraviolet spectropolarimetry: conservative and nonconservative mass transfer in OB interacting binaries"
22. N. St-Louis, ..., **T. Shenar** et al. 2022, Ap&SS, 367, 1182:  
"UV spectropolarimetry with Polstar: massive star binary colliding winds"
23. **T. Shenar**, H. Sana et al. 2022, Nat. Ast. 6, 1085:  
"An X-ray faint black hole born with a negligible kick in a massive binary of the Large Magellanic Cloud"
24. **T. Shenar**, H. Sana et al. 2022, A&A, 665, 148:  
"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"
25. V. Ramachandran, ..., **T. Shenar** et al. 2022, A&A, 667, 77: "Phase-resolved spectroscopic analysis of the eclipsing black hole X-ray binary M33 X-7: System properties, accretion, and evolution"
26. J. Toalá, ..., **T. Shenar** et al. 2022, MNRAS, 514, 2269 Multiple variability time-scales of the early nitrogen-rich Wolf-Rayet star WR 7
27. L. Mahy, H. Sana, **T. Shenar** et al. 2022, A&A, in press:  
"Identifying quiescent compact objects in massive Galactic single-lined spectroscopic binaries"
28. 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"
29. S. Brands, ..., **T. Shenar** et al. 2022, A&A, 663, 36:  
"Identifying quiescent compact objects in massive Galactic single-lined spectroscopic binaries"
30. 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"
31. 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"

32. 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"
33. 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"
34. S. Janssens, **T. Shenar** et al. 2022, A&A, 658, 129:  
"Uncovering astrometric black hole binaries with massive main-sequence companions with Gaia"
35. **T. Shenar**, H. Sana et al. 2021, A&A, 650, 147:  
"R 144: a wind-eclipsing binary with a total mass larger than  $140 M_{\odot}$ "
36. 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"
37. 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"
38. 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"
39. 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"
40. J. Bodensteiner, **T. Shenar** et al. 2020, A&A, 641, 43:  
"Is HR 6819 a triple system containing a black hole?. An alternative explanation"
41. J. Bodensteiner, **T. Shenar**, and H. Sana 2020, A&A, 641, 42:  
"Investigating the lack of main-sequence companions to massive Be stars"
42. 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"
43. **T. Shenar**, J. Bodensteiner et al. 2020, A&A, 639, 6:  
"The hidden companion in LB-1 unveiled by spectral disentangling"
44. N. Langer, ..., **T. Shenar** et al. 2020, A&A, 638, 39:  
"Properties of OB star-black hole systems derived from detailed binary evolution models"
45. M. Abdul-Masih, ..., **T. Shenar** et al. 2020, **Nature**, 580, 11:  
"On the signature of a 70-solar-mass black hole in LB-1"
46. L. Mahy, ..., **T. Shenar** et al. 2020, A&A, 634, 119:  
"The Tarantula Massive Binary Monitoring: III. Atmosphere analysis of double-lined binaries"
47. L. Mahy, ..., **T. Shenar** et al. 2020, A&A, 634, 118:  
"The Tarantula Massive Binary Monitoring. IV. Double-lined photometric binaries"
48. **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"

49. R. Hainich, ..., **T. Shenar** et al. 2020, A&A, 634, 49:  
"The stellar and wind parameters of six prototypical HMXBs and their evolutionary status"
50. 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"
51. **T. Shenar**, D. Sablowski et al. 2019, A&A, 627, 151:  
"The Wolf-Rayet binaries of the nitrogen sequence in the Large Magellanic Cloud"
52. 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"
53. 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 "
54. B. Kubátová, ..., **T. Shenar** et al. 2019, A&A, 623, 8:  
"Low-metallicity massive single stars with rotation"
55. 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"
56. 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"
57. D. Gruner, ..., **T. Shenar** et al. 2019, A&A, 621, 63:  
"The extreme O-type spectroscopic binary HD 93129A. A quantitative, multiwavelength analysis"
58. 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"
59. T. Ramiaramanantsoa, R. Ramiaramanantsoa, **T. Shenar** et al. 2018, MNRAS, 480, 972:  
"A BRITE view on the massive O-type supergiant V973 Scorpii"
60. **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"
61. 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"
62. T. Ramiaramanantsoa, ..., **T. Shenar** et al. 2018, ApJ, 473, 5532:  
"BRITE-Constellation photometry of the early O-type supergiant  $\zeta$  Puppis unveils the photospheric drivers of its small- and large-scale wind structures"
63. N. D. Richardson, ..., **T. Shenar** et al. 2017, MNRAS, 471, 2715:  
"The variability of the BRITE-est Wolf-Rayet binary,  $\gamma^2$  Velorum I. Photometric and spectroscopic evidence for colliding winds"
64. R. Hainich, L. M. Oskinova, **T. Shenar** et al. 2018, A&A, 609, 94:  
"Observational properties of massive black hole binary progenitors"
65. 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"



66. 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"
67. **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"
68. 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"
69. **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"
70. 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"
71. A. Sander, ..., **T. Shenar** 2017, A&A, 603, 86:  
"Coupling hydrodynamics with CMF radiative transfer. I. A unified approach for OB and WR stars"
72. 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"
73. **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"
74. Almeida, L. A. ..., **T. Shenar** et al. 2017, A&A, 589, 84:  
"The TMBM I. Observational campaign and OB-type spectroscopic binaries"
75. N. D. Richardson, **T. Shenar**, O. Roy-Loubier et al. 2016, MNRAS, 461, 4115:  
"The CHARA Array resolves the long-period Wolf-Rayet binaries WR 137 and WR 138"
76. E. J. Aldoretta, ..., **T. Shenar** et al. 2016, MNRAS, 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"
77. 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"
78. **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"
79. D. Huenemoerder, ..., **T. Shenar**, 2015, ApJ, 815, 29:  
"Probing Wolf-Rayet Winds: Chandra/HETG X-Ray Spectra of WR 6"
80. 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"
81. 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"
82. 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"

83. 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"
84. 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"
85. **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"
86. H. Todt, ..., **T. Shenar**, 2015, A&A, 579, 75:  
"Potsdam Wolf-Rayet model atmosphere grids for WN stars"
87. 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"
88. 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"
89. **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 talks.

1. Talk (invited) "Observational constraints on massive binary star evolution",  
XXXII IAU General Assembly, Aug. 2024 (upcoming), Cape Town, South Africa
2. Talk (invited): "Hunting for dormant black holes in massive binaries",  
Astrophysics seminar, Observatório do Valongo, Federal University of Rio de Janeiro,  
Nov. 2023, Rio, Brazil (online)
3. Talk (invited): "Hunting for dormant black holes in massive binaries",  
Astrophysics seminar, University of Sheffield, Oct. 2023, Sheffield, UK
4. Talk (invited): "Massive stars: factories of energetic particles & seeds of gravitational  
waves",  
Variable  $\gamma$ -ray sources conference, April 2023, Innsbruck, Austria
5. Talk (invited): "The renaissance of black holes",  
Queen's Uni. astrophysics seminar, Jan. 2023, Kingston, Canada
6. Talk (invited): "A new population of BHs",  
Dutch BH consortium meeting, January 2023, Enschede, NL
7. Talk: "Wolf-Rayet stars",  
IAU massive star symposium, May 2022, Ballyconnell, Ireland
8. Talk (invited): "Hunting for stellar-mass black holes",  
Weizmann Institute colloquium, Mar. 2022, Rehovot, Israel
9. Talk (invited): "Hunting for stellar-mass black holes",  
Supernova group of I. Arcavi at U. Tel Aviv, Mar. 2022, Tel Aviv, Israel
10. Talk (invited): "Binaries across the evolutionary axis",  
ISSI meeting, Dec 2021, Bern, Switzerland
11. Talk: "A new type of post-interaction Be binaries "  
Be X-ray Binaries conference, Jul. 2021, Valencia, Spain (virtual)
12. Talk: "The role of winds, mixing & binaries in the formation of Wolf-Rayet stars",  
EAS annual meeting, June 2021, virtual
13. Talk (invited): "The production of classical Wolf-Rayet stars at low metallicity ",  
IAU massive star symposium, May 2021, virtual
14. Talk: "Very massive binaries in the Tarantula "  
The VFTS meeting, Mar. 2021, virtual
15. Talk (invited): "The hot part of the Hertzsprung-Russel diagram"  
at the astrophysics of the Instituto de Astrofísica (IAC) de Canarias, Mar. 2021, Tenerife,  
Spain
16. Talk (invited): "The hunt for Galactic black-holes"  
at the astrophysics seminar of the University of Auckland, Feb. 2021, Auckland, New  
Zealand
17. Talk (invited): "The hunt for Galactic black-holes"  
at the astrophysics seminar at the University of Tel-Aviv, Nov. 2020, Tel-Aviv, Israel

18. Talk (invited): "The hunt for Galactic black-holes"  
at the astrophysics seminar at UNAM, Sep. 2020, Mexico City, Mexico
19. Talk (invited): "The hunt for Galactic black-holes"  
at the astrophysics seminar at the University of Birmingham, Jul. 2020, Birmingham, UK
20. Talk (invited): "Do we understand the progenitors of black holes and neutron stars?",  
weekly astrophysics seminar, Dec. 2019, University of Sheffield, England
21. Talk (invited): "Do we understand the progenitors of black holes and neutron stars?",  
weekly astrophysics seminar, Dec. 2019, Armagh Observatory, Northern Ireland
22. Talk: "The formation and evolution of Wolf-Rayet stars",  
at the KU Leuven institute of astrophysics (lvS) seminar, Oct. 2019, KU Leuven, Belgium
23. 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
24. Talk (invited): "The Wolf-Rayet stars in the Magellanic Clouds",  
at the Oxford astrophysics colloquium, Jun. 2019, Oxford, England
25. Talk (invited): "Confronting massive-star evolution at subsolar metallicity",  
at the Argelander Institute's colloquium, Mar. 2019, Bonn, Germany
26. 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
27. Talk (invited): "Mass-loss, binary interaction and the Wolf-Rayet connection",  
at the massive star seminar, Feb. 2019, University of Amsterdam, Amsterdam, Germany
28. Talk: "The formation of Wolf-Rayet stars at low metallicity",  
at the conference "Massive stars and supernovae", Nov. 2018, Bariloche, Argentina
29. 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
30. Talk: "Constraining the X-ray formation regions in  $\gamma$ Cas systems",  
at the conference "The  $\gamma$ Cas phenomenon", Sep. 2018, Strasbourg, France
31. Talk: "Wolf-Rayet binaries as progenitors of high-mass X-ray binaries",  
at the IAU general assembly, Aug. 2018, Vienna, Austria
32. Talk (invited): "Analyses of massive multiples in the era of gravitational waves",  
at the "Stellar astrophysics" seminar of KU Leuven, Jun. 2018, Leuven, Belgium
33. Talk (invited): "Unsolved issues of massive stars in the era of gravitational waves",  
at the Royal Observatory Colloquium, Nov. 2017, Edinburgh, Scotland
34. 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
35. 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
36. Talk: "Using magnetic stars to constrain the weak-wind problem",  
at the conference "stars with a stable magnetic field", Brno, Aug. 2017, Czech Republic
37. 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

38. Talk (invited): "The interplay between X-rays and stellar winds",  
at the "high energy Astrophysics" seminar, Oct. 2016, **MIT**, Cambridge, USA
39. 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
40. Talk "Constraining binary effects on WR stars in the Small Magellanic Cloud",  
at the conference "Bridging the gap", Jun. 2016, Buckinghamshire, England
41. Talk: "Spektroskopie von Massereichen, engen Doppelsternsysteme",  
at the conference "Spektroskopie Tagung in Adlershof", Apr. 2016, Adlershof, Germany
42. Talk: "Ultra-luminous X-ray sources and their implications",  
at the astronomy seminar of the Université de Montréal, Oct. 2015, Montreal, Canada
43. 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
44. Talk: "The impact of rotation on Wolf-Rayet spectra",  
at the "international workshop on Wolf-Rayet stars", Jun. 2015, Potsdam, Germany
45. Talk "A comprehensive analysis of the massive multiple system Delta Orionis A",  
at the Annual meeting of German Astronomical Society, Sep. 2014, Bamberg, Germany
46. Talk "Wolf-Rayet Binary systems and their spectral uniqueness",  
at the workshop "Spectral Disentanglement", Aug. 2014, Rio de Janeiro, Brasil
47. Talk "A very hot Wolf-Rayet star with a circular shell in the LMC",  
at the workshop "Astrospheres", Dec. 2013, Leiden, Netherlands