

Peer-reviewed publications¹

- [1]* El Mellah I., Sundqvist J. O., & Keppens R.
Wind Roche lobe overflow in high mass X-ray binaries : A possible mass transfer mechanism for Ultraluminous X-ray sources - A&A 2019
- [2]* Decin L., Homan W., Danilovich T., de Koter A., Engels D., Waters L. B. F. M., Muller S., Gielen C., García-Hernández D. A., Stancliffe R. J., Van de Sande M., Molenberghs G., Kerschbaum F., Zijlstra A. A., El Mellah I.
Reduced mass-loss rate of OH/IR stars due to binary interaction - Nature Astronomy 2019
- [3]* El Mellah I., Sander A. A. C., Sundqvist J. O., & Keppens R.
Formation of wind-captured discs in Supergiant X-ray binaries : consequences for Vela X-1 and Cygnus X-1 - A&A 2019
- [4]* El Mellah I., Sundqvist J. O., & Keppens R.
Accretion from a clumpy massive-star wind in Supergiant X-ray binaries - MNRAS 2018
- [5]* Xia C., Teunissen J., El Mellah I., Chané E. & Keppens R.
MPI-AMRVAC 2.0 for solar and astrophysical applications - ApJS 2018
- [6]* Grinberg V., Hell N., El Mellah I., Neilsen J., Sander A. A. C., Leutenegger M. A., Fürst F., Huenemoerder D. P., Kretschmar P., Kühnel M., Martínez-Núñez S., Niu S., Pottschmidt K., Schulz N. S., Wilms J. & Nowak M. A.
The clumpy absorber in the high mass X-ray binary Vela X-1 - A&A 2017
- [7]* El Mellah I. & Casse F.
A numerical investigation of wind accretion in persistent Supergiant X-ray Binaries I - Structure of the flow at the orbital scale - MNRAS 2017
- [8]* El Mellah I. & Casse F.
Numerical simulations of axisymmetric hydrodynamical Bondi-Hoyle accretion on to a compact object - MNRAS 2015
- [9] Sanchis-Ojeda R., Rappaport S., Winn J., Kotson M., Levine A., El Mellah I.
A Study of the Shortest-period Planets Found with Kepler - ApJ 2014
- [10] Rappaport S., Deck K., Levine A., Borkovits T., Carter J., El Mellah I., Sanchis-Ojeda R., Kalomeni B.
Triple-star Candidates among the Kepler Binaries - ApJ 2013
- [11]* Rappaport S., Levine A., Chiang E., El Mellah I., Jenkins J., Kalomeni B., Kite E. S., Kotson M., Nelson L., Rousseau-Nepton L., Tran K.
Possible Disintegrating Short-Period Super-Mercury Orbiting KIC 12557548 - ApJ 2012

¹The stars indicate the papers in which I made a major contribution.

Proceedings

- [12] El Mellah I., Sundqvist J. O., & Keppens R.
Wind-captured discs in Supergiant X-ray binaries
IAU Vienna 2018
- [13] Fürst F., Kretschmar P., Grinberg V., Pottschmidt Katja, Wilms J., Kühnel M., El Mellah I., Martínez-Núñez S.
Variability in High Mass X-ray Binaries
XMM-Newton workshop 2018
- [14] El Mellah I., Sundqvist J. O., & Keppens R.
Clumpy wind accretion in Supergiant X-ray Binaries
Journées de la Société Française d'Astronomie et d'Astrophysique 2017
- [15] El Mellah I., Casse F.
Numerical simulations of axisymmetric Bondi-Hoyle accretion onto a compact object
Journées de la Société Française d'Astronomie et d'Astrophysique 2015

Conferences & workshops

- Fb 2019 12th INTEGRAL conference - Geneva, (SW)
- Oc 2018 Stellar Winds in Massive X-ray Binaries workshop - Santander (SP) - **invited**
- Oc 2018 Leuven-Amsterdam-Bonn massive stars meeting - Leuven (BE)
- Ag 2018 IAU General Assembly - High Mass X-ray Binaries symposium - Vienna, AT
- Jn 2018 Belgium FNRS meeting - Brussels, BE
- Sp 2017 Frontiers of Astrophysical Modeling - KU Leuven (BE)
- Ag 2017 Numerical techniques in MHD simulations - Köln (GE)
- Jl 2017 Journées de la SF2A - Paris (FR)
- Mr 2017 CHARM meeting - Brussels (BE)
- Mr 2017 Stellar winds in massive X-ray binaries (ISSI workshop) - Bern (SW) - **invited**
- Sp 2016 Super-Eddington accretion on compact objects - Arbatax (IT)
- Mr 2015 International school of Computational Astrophysics - Les Houches (FR)
- Jn 2015 Journées de la SF2A - Toulouse (FR)
- Mr 2015 Turbulence, magnetic fields and self organization - Les Houches (FR)

Seminars

- Fb 2019 APC Paris 7 Diderot (FR)
- Nv 2018 IRAP Toulouse (FR)
- Jl 2018 TAPIR Caltech (US)
- Fb 2018 LUPM Montpellier (FR)
- Dc 2017 Radboud University Nijmegen (NL)
- Nv 2017 ESAC, Madrid (SP)
- Sp 2017 LUTH, Observatory of Paris (FR)

Sp 2016 Aarhus University (DN)
Ap 2016 APC, Paris 7 University (FR)
Ap 2016 CmPA, KU Leuven (BE)
Oc 2015 AIM, CEA (FR)

Posters

Jl 2018 Clumpy wind accretion in Supergiant X-ray binaries, COSPAR Pasadena (US)
Jn 2017 Clumpy wind accretion in Supergiant X-ray binaries, EWASS, Prague (CZ)
Dc 2015 Wind accretion onto compact objects, Texas symposium, Geneva (SW)
Nv 2014 Wind accretion undergoing flip-flop instability, IAP, Paris (FR)

Diverse communications

El Mellah I.

Wind accretion onto compact objects

PhD manuscript 2016

El Mellah I.

3D-printed models and [Wolfram interactive applet for the Roche potential](#)
2015

1h30 radio interview on scientific communication in [Faconde](#)
Brussels 2017