

AstroMundus – Astrophysics, Editions 6 to 8 (2015-2020)

Scientific publications in professional journals and conference proceedings authored or co-authored by AstroMundus students and based on / related to their Master thesis work or other projects they worked on during their Masters – updated list as of June 2020

Student: **Luis Busta** (AstroMundus Edition 6)

- "The Carnegie Supernova Project I. Photometry data release of low-redshift stripped-envelope supernovae"
Authors: M.D. Stritzinger, J.P. Anderson, C. Contreras, [...], **L. Busta**, et al.
Astronomy & Astrophysics, 609, A134 (2018)
<https://www.aanda.org/articles/aa/pdf/2018/01/aa30842-17.pdf>

Student: **Ruslan Brilenkov** (AstroMundus Edition 7)

- "Second-order Cosmological Perturbations Engendered by Point-like Masses"
Authors: **R. Brilenkov**, M. Eingorn
The Astrophysical Journal, 845, 153 (2017)
<https://iopscience.iop.org/article/10.3847/1538-4357/aa81cd/pdf>
- "Perfect fluids with $\omega = \text{const}$ as sources of scalar cosmological perturbations"
Authors: M. Eingorn, **R. Brilenkov**
Physics of the Dark Universe, 17, 63 (2017)
<https://doi.org/10.1016/j.dark.2017.08.003>
- "Scalar perturbations in cosmological $f(R)$ models: the cosmic screening approach"
Authors: O. Akarsu, **R. Brilenkov**, M. Eingorn, V. Shulga, A. Zhuk
The European Physics Journal C, 78, 609 (2018)
<https://link.springer.com/article/10.1140/epjc/s10052-018-6091-7>

Student: **Javier Carrón Duque** (AstroMundus Edition 7)

- "Point source detection and false discovery rate control on CMB maps"
Authors: J. Carron Duque, A. Buzzelli, Y. Fantaye, D. Marinucci, A. Schwartzman, N. Vittorio
Astronomy and Computing, 28, 100310 (2019)
<https://arxiv.org/pdf/1902.06636.pdf>

Student: **Adrián Castañón Esteban** (AstroMundus Edition 7)

- "Magrathea: Dust growth experiment in micro-gravity conditions"
Authors: A. G. C. Guerra, A. Banos Garcia, **A. Castañón Esteban**, et al.
eprint arXiv:1803.10477 (2018)
<https://arxiv.org/pdf/1803.10477.pdf>

Student: **Abhishek Chougule** (AstroMundus Edition 7)

- "Models of Emission-Line Profiles and Spectral Energy Distributions to Characterize the Multi-Frequency Properties of Active Galactic Nuclei"
Authors: La Mura G., Berton M., Chen S., **Chougule A.**, et al.
Atoms, 5, 43 (2017)
<https://www.mdpi.com/2218-2004/5/4/43/htm>

- “The impact of improved Stark-broadening widths on the modeling of double-ionized chromium lines in hot stars”
Authors: **Chougule A.**, Przybilla N., Dimitrijević M., Schaffenroth V.
Contributions of the Astronomical Observatory Skalnaté Pleso, 50, 139 (2020)
<http://www.astro.sk/caosp/Eedition/FullTexts/vol50no1/pp139-146.pdf>

Student: **Jarred Gershon Green** (AstroMundus Edition 7)

- "A search for dark matter in Triangulum II with the MAGIC telescopes"
Authors: Acciari V. A., Ansoldi S., Antonelli L. A., [...], **Green J. G.**, et al.
Physics of the Dark Universe, 28, 100529 (2020)
<https://arxiv.org/pdf/2003.05260.pdf>

Student: **Andrea Guzmán Mesa** (AstroMundus Edition 7)

- “Activity induced variation in spin-orbit angles as derived from Rossiter-McLaughlin measurements”
Authors: Oshagh M., Triaud A. H. M., Burdanov A., [...], **Guzman Mesa A.**, et al.
Astronomy & Astrophysics, 619, A150 (2018)
<https://www.aanda.org/articles/aa/pdf/2018/11/aa33709-18.pdf>

Student: **Huanchen Hu** (AstroMundus Edition 7)

- "Signature of solar g modes in first-order p-mode frequency shifts"
Authors: Böning V. G. A., **Hu H.**, Gizon L.
Astronomy & Astrophysics, 629, A26 (2019)
<https://www.aanda.org/articles/aa/pdf/2019/09/aa35434-19.pdf>

Student: **Jay Vijay Kalinani** (AstroMundus Edition 7)

- "First 100 ms of a long-lived magnetized neutron star formed in a binary neutron star merger"
Authors: Ciolfi R., Kastaun W., **Kalinani J. V.**, Giacomazzo B.
Physical Review D, 100, 023005
<https://arxiv.org/pdf/1904.10222.pdf>

Student: **Agata Maria Wisłocka** (AstroMundus Edition 7)

- "Comparative analysis of the influence of Sgr A* and nearby active galactic nuclei on the mass loss of known exoplanets"
Authors: **Wisłocka A. M.**, Kovačević A. B., Balbi A.
Astronomy & Astrophysics 624, A71 (2019)
<https://www.aanda.org/articles/aa/pdf/2019/04/aa34655-18.pdf>
- “The XUV Radiation Impact of Near AGNs ($z < 0.5$) on the Atmospheres of Milky Way Planets”
Authors: **Wisłocka A. M.**, Kovačević A. B., Balbi A., Ilić D., Popović L.
Poster presentation at the XXXth General Assembly of the International Astronomical Union, Division F Meeting on Planetary Systems and Bioastronomy, Vienna (2018)
<https://www.uibk.ac.at/astromundus/results.html>

Student: **Priyanka Giri** (AstroMundus Edition 8)

- "Spacetime Fluctuations and a Stochastic Schrödinger-Newton Equation"
Authors: Bera S., **Giri P.**, Singh T. P.

Foundations of Physics, Volume 47, 897
<https://arxiv.org/pdf/1608.02102.pdf>

Student: Maryam Hami (AstroMundus Edition 8)

- “Is The Milky Way A Grand Design Spiral? ”
Authors: **Hami M.**, Balser D., Wenger T. V., Anderson L., Bania T.
American Astronomical Society, AAS Meeting #233, id.252.12 (2019)
<https://ui.adsabs.harvard.edu/abs/2019AAS...23325212H/abstract>

Student: Ketzer Laura (AstroMundus Edition 8)

- "K2 Campaign 5 observations of pulsating subdwarf B stars: binaries and super-Nyquist frequencies"
Authors: Reed M. D., Armbrecht E. L., Telting J. H., [...], **Ketzer L.**, et al.
Monthly Notices of the Royal Astronomical Society, 474, 5186 (2018)
<https://academic.oup.com/mnras/article/474/4/5186/4693869>
- “A review of seismic observations of Kepler and K2-Observed sdBV stars”
Authors: Reed M. D., Baran A. S., Telting J. H., [...], **Ketzer L.**, et al.
Open Astronomy, 27, 157 (2018)
<https://www.degruyter.com/view/journals/astro/27/1/article-p157.xml>
- “K2 & K1 Precision asteroseismology of hot horizontal branch (subdwarf B) stars”
Authors: Reed M. D., Baran A. S., Telting J. H., [...], **Ketzer L.**, et al.
American Astronomical Society, AAS Meeting #233, id.418.04 (2019)
<https://ui.adsabs.harvard.edu/abs/2019AAS...23341804R/abstract>
- “Two p-mode-dominated subdwarf B pulsators in binaries with F-star companions observed with K2”
Authors: Reed M. D., Telting J. H., **Ketzer L.**, et al.
Monthly Notices of the Royal Astronomical Society, 483, 2282 (2019)
<https://academic.oup.com/mnras/article/483/2/2282/5173067>

Student: Hitesh Lala (AstroMundus Edition 8)

- "A plague of magnetic spots among the hot stars of globular clusters"
Authors: Momany Y., Zaggia S., Montalto M., [...], **Lala H.**, et al.
Nature Astronomy, Advanced Online Publication (2020)
<https://arxiv.org/pdf/2006.02308.pdf>

Student: Yeh Fu-Chi (AstroMundus Edition 8)

- “Ruprecht 147: A Paradigm of Dissolving Star Cluster”
Authors: **Yeh F. C.**, Carraro G., Montalto M., Seleznev A. F.
The Astronomical Journal, 157, 115, (2019)
<https://iopscience.iop.org/article/10.3847/1538-3881/aaff6c/pdf>
- “The origin of globular cluster FSR 1758”
Authors: **Yeh F. C.**, Carraro G., Korchagin V. I., Pianta C., Ortolani S.
Astronomy & Astrophysics, 635, A125 (2020)
<https://www.aanda.org/articles/aa/pdf/2020/03/aa37093-19.pdf>
<https://arxiv.org/pdf/2002.03442.pdf>