prof. dr. Tomaž ZWITTER – curriculum vitae

Prof. Zwitter was born in 1961 in Ljubljana, Slovenia. Married, wife Savina, children Žiga, Matej, and Luka.

His research includes interstellar medium, single and binary stars, the Galaxy, its contents and evolution. These topics are studied by spectroscopy and photometry techniques. From 2004 to 2023 he has been the leader of the ongoing national research programme P1-0188 Astrophysics and physics of the atmosphere financed by the Slovenian research agency. In the last decade he led three projects financed by the European Space Agency. He teaches courses on observational and stellar astrophysics and introductory astronomy courses at the Faculty of Mathematics and Physics and at Faculty of Education of the University of Ljubljana and advises PhD students. He is active in science outreach, frequently giving public lectures, translating APOD and other materials, and regularly appearing in the media, also preparing a monthly broadcast on astronomy which is aired on the national radio.

He is a (co)author of ~240 refereed articles. His works have over 30000 clean citations, according to the NASA/ADS database (ui.adsabs.harvard.edu), h index is 67. From 2004 to its completion in 2020 he has been project scientist of the RAVE survey (www.rave-survey.org). He is a core member of Galah (galah-survey.org) and Gaia-ESO (www.gaia-eso.eu) ground based spectroscopic surveys. Since 2000 he actively participates to the Gaia mission and analysis of data from its Radial Velocity Spectrometer.

EDUCATION:

Diploma in physics, University E. Kardelj in Ljubljana, 1985;

Magister philosophiae in astrophysics cum laudae, International School for Advanced Studies, Trieste, Italy, 1988;

PhD in astrophysics cum laudae, International School for Advanced Studies, Trieste, Italy, 1990.

EMPLOYMENT AND MANAGEMENT:

Employee of the University of Ljubljana since 1985, as a professor for astrophysics since 2005.

In-between: Postdoc, International Centre for Theoretical Physics, Trieste, 1993; postdoc, Universita di Padova, 1994-95; visiting researcher, Observatoire du Meudon, Paris, 2004; visiting scientist (Royal Society fellowship), University College London, Mullard Space Sciences Laboratory, 2004; recently (2017) a Distinguished Visitor to the Research School of Astronomy and Astrophysics of the Australian National University in Canberra.

Head of the Department of Physics of the Faculty for Mathematics and Physics of the University of Ljubljana (2009-2011). He is a member of the IAU, a past vice-president of its Commission 30 Radial Velocities (2012-2015) and current organizing committee member of Commission G1 Binary and Multiple Star Systems.

SELECTED PUBLICATIONS:

by normalized citations (= citations / number of co-authors):

1. Prša, A., Zwitter, T., 2005, ApJ, 628, 426. “A Computational Guide to Physics of Eclipsing Binaries. I. Demonstrations and Perspectives”
2. Munari, U., Zwitter, T. 1997, A&A, 318, 269, "Equivalent width of Na I and K I lines and reddening"
3. Munari, U., Sordo, R., Castelli, F., Zwitter, T. 2005, A&A, 442, 1127, "An extensive library of 2500 - 10500 A synthetic spectra"
4. Sulentic, J.W., Zwitter, T., Marziani P., Calvani, M. 2000, ApJ, 536, L5, "Eigenvector 1: An optimal correlation space for active galactic nuclei"
5. Munari, U., Zwitter, T. 2002, A&A, 383, 188, "A multi-epoch spectrophotometric atlas of symbiotic stars"

by important role:

1. Zwitter, T., et al. 2008, AJ, 136, 421, "The Radial Velocity Experiment (RAVE): Second data release"
2. Zwitter, T., et al. 2010, A&A, 522, A54, "Distance determination for RAVE stars using stellar models. II. Most likely values assuming a standard stellar evolution scenario"
3. D'Odorico, S, Oosterloo, T., Zwitter, T., Calvani, M. 1991, Nature, 353, 329. "Evidence that the compact object in SS433 is a neutron star and not a black hole"
4. Kos, J., Zwitter, T., et al. 2014, Science, 345, 791. “Pseudo three-dimensional maps of the diffuse interstellar band at 862 nm”
5. Zwitter, T., et al. 2018, MNRAS, 481, 64, "The GALAH survey: accurate radial velocities and library of observed stellar template spectra"

by total number of citations:

1. Gaia collaboration, Brown A.G.A., et al. 2018, A&A, 616, 1, "Gaia data release 2. Summary of the contents and survey properties"
2. Gaia collaboration, Prusti, T., et al. 2016, A&A 595, 1, "The Gaia mission"
3. Gaia collaboration, Brown A.G.A., et al. 2016, A&A, 595, 2, "Gaia data release 1. Summary of the astrometric, photometric, and survey properties"
4. Gaia collaboration, Brown, A.G.A., et al. 2021, A&A, 649, 1, "Gaia early data release 3. Summary of the contents and survey properties"
5. Steinmetz, M., Zwitter, T., et al. 2006, AJ, 132, 1645, "The Radial velocity experiment (RAVE): First data release"