Zdeněk Prudil

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SCIENTIFIC CAREER

ESO Fellow
European Southern Observatory (ESO), Garching, Germany **from Dec 2022**

Postdoctoral researcher
Astronomisches Rechen-Institut, Heidelberg, Germany **Jul 2020 – Nov 2022**
Focus: Chemo-dynamical mapping of the Galactic bulge

Graduate researcher
Astronomisches Rechen-Institut, Heidelberg, Germany **Sep 2016 – Jun 2020**
Focus: RR Lyrae stars as tracers of substructure and Galactic archaeology

EDUCATION

Ph.D. in Astronomy: Astronomisches Rechen-Institut, Heidelberg University, Heidelberg, Germany, *Supervisor:* Prof. Dr. Eva K. Grebel **2016 – 2020**

MSc. in Theoretical Physics and Astrophysics: Faculty of Science, Masaryk University, Brno, Czech Republic, *Supervisor:* Mgr. Marek Skarka, Ph.D. **2014 – 2016**

BSc. in Astrophysics: Faculty of Science, Masaryk University, Brno, Czech Republic, *Supervisor:* doc. RNDr. Miloslav Zejda, Ph.D. **2011 – 2014**

RESEARCH INTERESTS

- Pulsating variable stars
- The Milky Way structure and dynamics using stellar tracers
- Data analysis and machine learning

FELLOWSHIPS AND AWARDS

ESO postdoctoral research fellowship **Dec 2022 - May 2026**

Hector Fellowship: Hector Fellow Academy, Germany **Apr 2017 - Apr 2020**
Benefits: 3 years of full Ph.D. funding, including a research fund of 45 000 €

The International Max Planck Research School for Astronomy and Cosmic Physics: Fellow of the IMPRS-HD **Sep 2016 - Apr 2020**

Masaryk University: Deans' award for the best Master thesis 1 000 € **Jun 2017**
Thesis: Blazhko Effect in Galactic Bulge RR Lyrae Stars

PUBLICATION RECORD

- 37 refereed publications (15 as a first author, and 9 as second/third co-author)
- 765 citations, h-index= 18 (based on ADS, as of 7th January 2026)

ACADEMIC SERVICE

Journal referee: Astrophysical Journal (ApJ), Astronomical Journal (AJ), Astronomy and Astrophysics (A&A), Monthly Notices of the Royal Astronomical Society (MNRAS), Journal of the American Association of Variable Star Observers (JAAVSO), Astrophysics and Space Science

Grant reviewer: The National Fund for Scientific and Technological Development: FONDECYT grant evaluation, Chile (**2023**)

Committee work: ESO Summer Student Internship Selection Committee (**2023**), ESO Studentship Selection Committee (**2023**, **2024**, **2025**), ESO Workshops 2026 selection committee (**2025**), Scientific assistant for the ESO Observing Programs Office (**Spring 2024 + P114**, **Spring 2025 + P116**).

COLLABORATION MEMBERSHIPS

Wide-field Spectroscopic Telescope (WST) – member of the time-domain working group.

4MOST spectroscopic survey – member of S1 (The Milky Way Halo Low-Resolution Survey) and S9 (One Thousand and One Magellanic Fields, 1001MC) consortium surveys and developer for the Infrastructure Working Group 7 – Galactic pipeline.

Member of KASC and TASC: Member of the Kepler Asteroseismic Science Center (KASC) Working Group 7, and TESS Asteroseismic Science Center (TASC) Working Group 6: RR Lyrae and Cepheid stars.

Member of Collaborative Research Center (SFB) 881: "The Milky Way System", University of Heidelberg 2020 – 2022.

SUCCESSFUL PROPOSALS as a PI and Co-I

– **Principal Investigator of BEACON@4MOST**, a 4MOST supplementary target program accepted for inclusion in the 4MOST survey plan. The program aims to observe up to 9970 RR Lyrae stars (corresponding to approximately 3330 fibre-hours, assuming ≈ 20 min per target) over the five-year survey duration.

– **Co-Investigator of STITCH@4MOST**, a 4MOST supplementary target program selected for inclusion in the 4MOST survey plan. The program is designed to obtain $\sim$1021 spectroscopic observations of Galactic Type II and Anomalous Cepheids, corresponding to roughly 340 fibre-hours assuming typical exposure times of $\sim$20 minutes.

In other facilities, I was awarded more than **140 hours as a PI** and > 230 hours as Co-I on 8-meter class telescopes.

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 29.17 hours *Program*: GS-2025B-Q-412 **2025**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 23.56 hours (my science case and experimental design) *Program*: GS-2025B-Q-412 **2025**

Gemini North, MAROON-X, Co-I: Z. Prudil – total time awarded: 22.2 hours (my science case and experimental design) *Program*: GN-2025B-Q-411 **2025**

Gemini North, MAROON-X, Co-I: Z. Prudil – total time awarded: 4.55 hours (my science case and experimental design) *Program*: GN-2025B-Q-407 **2025**

Gemini North, MAROON-X, Co-I: Z. Prudil – total time awarded: 1.87 hours (my science case and experimental design) *Program*: GN-2025B-Q-406 **2025**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 12.48 hours (my science case and experimental design) *Program*: GS-2025B-Q-411 **2025**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 1.93 hours (my science case and experimental design) *Program*: GS-2025B-Q-410 **2025**

VLT, UVES, PI: Z. Prudil – total time awarded: 20 hours
Program: 115.27V9 **2025**

VLT, UVES, PI: Z. Prudil – total time awarded: 1.5 hours
Program: 115.27VB **2025**

VLT, HAWKI, Co-I: Z. Prudil – total time awarded: 30 hours
Program: 115.27YU **2025**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 24.8 hours (my science case and experimental design) *Program*: GS-2025A-Q-411 **2025**

Gemini North, MAROON-X, Co-I: Z. Prudil – total time awarded: 22.2 hours (my science case and experimental design) *Program*: GN-2025A-Q-408 **2025**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 10.5 hours *Program*: GS-2025A-Q-223 **2025**

Gemini South, Zorro, Co-I: Z. Prudil – total time awarded: 1.1 hours *Program*: GS-2025A-FT-107 **2025**

Gemini North, Alopeke, Co-I: Z. Prudil – total time awarded: 2.5 hours *Program*: GN-2025A-FT-211 **2025**

SOAR, Goodman HTS, Co-I: Z. Prudil – total time awarded: 20 hours
Program: 2025A-496856 **2025**

VLT, UVES, PI: Z. Prudil – total time awarded: 60.0 hours
Program: 114.27LY **2024**

VLT, UVES, PI: Z. Prudil – total time awarded: 59.4 hours
Program: 113.26CJ **2024**

Gemini South, GHOST, Co-I: Z. Prudil – total time awarded: 19.5 hours *Program*: GS-2024A-Q-414 **2024**

MPG/ESO 2.2m telescope, FEROS, PI: Z. Prudil – total time awarded: 72 hours
Program: 0109.A-9029(A) **2021**

Gemini South, Zorro, Co-I: Z. Prudil – total time awarded: 9.9 hours
Program: GS-2021B-Q-315 **2021**

Gemini North, Alopeke, Co-I: Z. Prudil – total time awarded: 6.5 hours
Program: GN-2021B-Q-309 **2021**

Gemini South, Zorro, Co-I: Z. Prudil – total time awarded: 8.7 hours
Program: GS-2021A-Q-220 **2021**

Gemini North, Alopeke instrument, Co-I: Z. Prudil – 2.1 hours
Program: GN-2020B-FT-15 **2020**

MPG/ESO 2.2m telescope, FEROS, PI: Z. Prudil – DDT 10 hours
Program: 0103.A-9029(A) **2019**

VLT, ESPRESSO, PI: Z. Prudil – total time awarded: 2.6 hours
Program: 60.A-9511(A) **2019**

RESEARCH VISITS

- Osservatorio Astronomico di Capodimonte, Napoli, Italy **July 2025**
- University of Central Lancashire, Preston, United Kingdom **May 2025**
- Astronomical Institute of the Czech Academy of Sciences, Ondrejov, Czech Republic **Oct 2022**
- Faculty of Science, Masaryk University, Brno, Czech Republic **Oct 2022**
- Faculty of Science, Masaryk University, Brno, Czech Republic **Oct 2018**
- Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences, Warsaw, Poland **Mar 2018**
- Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences, Warsaw, Poland **Feb 2016**

TECHNICAL SKILLS

Programming languages: Python (`numpy`, `scipy`, `matplotlib`, `scikit-learn`, `emcee`), and working knowledge of SQL and ADQL. Basic knowledge of C and HTML.

Software: `AGAMA`, `galpy`, `iSpec`, `Period04`, LaTeX, `MOOG`, data reduction pipelines: `ESO Reflex`- UVES, `CERES`

STUDENT SUPERVISION & TEACHING

Mentoring and co-supervising experience:

- Mentoring four PhD students at ESO
- EMANUELA LUONGO graduate student at the Osservatorio Astronomico di Capodimonte, Via Moiariello, Naples, Italy, Co-supervised her research, culminating in a peer-reviewed first-author publication (Luongo et al., including **Prudil, Z.**, *A&A*, 690, L17). **Jul 2023 – Oct 2023**
- CLAIRE SKAGGS undergraduate student at the Saint Martin's University, Lacey, USA, Co-supervised her research, which contributed to a peer-reviewed publication (Kunder A., **Prudil Z.**, Skaggs C., et al. 2024, *AJ*, 168, 139) and earned her first prize in the Physics and Engineering poster session at the Murdock Undergraduate Research Conference. **Jul 2023**
- MARTIN MAX undergraduate student at the Faculty of Science, Masaryk University, Brno, Czech Republic, **Sep 2021 – Jun-2022**
- MAGDALENA ŠPOKOVÁ graduate student at the Faculty of Science, Masaryk University, Brno, Czech Republic, Co-supervised her research, which resulted in a first-author manuscript currently to be submitted to A&A. **from Sep 2020**

Teaching experience:

- GALAXY EVOLUTION at Heidelberg University
  Convener in winter and summer semester 2018, 2019 (weekly seminar)
- GALACTIC AND EXTRAGALACTIC ASTRONOMY at Heidelberg University
  Teaching assistant in summer semester 2017, 2018 (weekly exercises for master and graduate students)
- ASTRO-LAB at Heidelberg University (block course)
  Teaching assistant in winter semester 2017 (lab course for undergraduate and graduate students)

CONFERENCE ORGANIZATION

- LOC AT THE A DECADE OF ESO WIDE-FIELD IMAGING SURVEYS at ESO, **Oct 2023**
- LOC AT THE MOSAIC 2019 MEETING at Heidelberg University, **Mar 2019**

CONFERENCES TALKS

The RR Lyrae and Cepheid meeting 2024: Frontiers of Classical Pulsators – Theory and Observations, Marrakesh, *Talk*: Perspectives on the inner Milky Way via RR Lyrae variables (invited talk) **Nov 2024**

Abundance Gradients in the Local Universe, Garching, *Talk*: Mapping of the Milky Way bar (contributed talk) **Apr 2024**

The 55th Conference on Variable Stars Research, Brno, *Talk*: The latest findings on RR Lyrae-type stars (invited talk) **Nov 2023**

A Decade of ESO Wide-field Imaging Surveys, Garching, *Talk*: 7D mapping and timing of the Milky Way bar (contributed talk) **Oct 2023**

40 years of the Galactic Bulge and beyond, Elba, *Talk*: 7D mapping and timing of the Milky Way bar (contributed talk) **Sep 2023**

RRLyr and Cepheid stars: Large-scale surveys as bridges between spectroscopy and photometry, La Palma, *Talk*: The Orphan stellar stream in 7D using RR Lyrae stars (contributed talk) **Sep 2022**

Streams 21: Constraints on Dark Matter, New York, New York – online, *Talk*: The Orphan stream in 7D using RR Lyrae stars (contributed talk) **Feb 2021**

RRL/Cep 2019 - Frontiers of Classical Pulsators: Theory and Observations, Cloudcroft, New Mexico , *Talk*: Main and early shocks in RR Lyrae photometric light curves

(contributed talk) **Oct 2019**

A Synoptic View of the Magellanic Clouds - VMC, Gaia and Beyond, ESO Garching, *Poster*: Photometric study of the stellar overdensity north from the Small Magellanic Cloud **Sep 2019**

RRL2017 Revival of the classical pulsators: from galactic structure to stellar interior diagnostics, Niepołomice, *Talk*: The Oosterhoff Dichotomy in the Galactic Bulge (contributed talk) **Sep 2017**

The 48th Conference on Variable Stars Research, Prague, *Talk*: Multiple variability in RR Lyrae stars (contributed talk) **Nov 2016**

Meeting of Young CAMK, Centrum Astronomiczne im. Mikołaja Kopernika, Warsaw, *Talk*: Blazhko effect in Galactic bulge RR Lyrae stars (contributed talk) **Feb 2016**

RRL2015 High-Precision Studies of RR Lyrae Stars, Visegrád, *Poster*: Analysis of light curve of LP Camelopardalis **Oct 2015**

DEPARTMENTAL SEMINARS AND COLLOQUIA

Astromeeting OACN, Osservatorio Astronomico di Capodimonte, Napoli **July 2025**

Galaxy Evolution Seminar, Astronomisches Rechen-Institut, Heidelberg University, Heidelberg, Germany **May 2025**

Seminar, Jeremiah Horrocks Institute, University of Central Lancashire, Preston, United Kingdom **May 2025**

Seminar, Astronomical Institute of Czech Academy of Sciences, Ondrejov, Czech Republic **Oct 2022**

Astronomical seminar, Faculty of Science, Masaryk University, Brno, Czech Republic **Oct 2022**

ESO Informal Discussion, Garching bei Munich, Germany – online **Sep 2021**

Galaxy Coffee MPIA, Heidelberg, Germany – online **Mar 2021**

Gemini-South & CTIO Science coffee, La Serena, Chile – online **Oct 2020**

ARI Institute Colloquium, Astronomisches Rechen-Institut, Heidelberg University, Heidelberg, Germany **Jan 2020**

Hector Fellow Symposium, Heidelberg, *Talk*: Final Ph.D. presentation **Jul 2019**

Astronomical seminar, Faculty of Science, Masaryk University, Brno, Czech Republic **Oct 2018**

IMPRS Heidelberg seminar workshop 12th generation, Trifels, Germany **Apr 2018**

ARI Institute Colloquium, Astronomisches Rechen-Institut, Heidelberg University, Heidelberg, Germany **Jan 2017**

PARTICIPATED WORKSHOPS

2023 MESA Summer School, Konkoly, Budapest, Hungary **Aug 2023**

2019 MESA Summer School, University of California, Santa Barbara, California, United States of America **Aug 2019**

IMPRS Heidelberg Summer school: Gaia Data & Science, Heidelberg University, Germany **Sep 2018**

Workshop: Near-Field Cosmology with the Dark Energy survey's DR1 and beyond, Chicago, Illinois, United States of America **Jun 2018**

Gaia Data Workshop, Heidelberg, Germany **Nov 2016**

MBA courses: Three courses as a part of the Hector Fellow Academy, focused on the soft skills and project management: PROJECTS, PEOPLE, VALUES at the Karlsruhe Institute of Technology, Karlsruhe, Germany **2018 – 2019**

PUBLIC OUTREACH

- VYSKOV OBSERVATORY at Vyskov – Astronomer: public observations of the night sky and Sun using the telescopes **Summer 2013, 2014**
- BRNO OBSERVATORY AND PLANETARIUM at Brno – Night Sky Guide: public observations of the night sky using the telescopes **Full year 2015**

Refereed Publications

37. Arellano Ferro, A., et al., including **Prudil, Z.**: The variable stars in the compact halo globular cluster NGC 5634 visited again, 2025, MNRAS, 541, 3146
36. Kunder, A., **Prudil, Z.**, Monachesi, A., et al.: The Galactic bulge exploration: V. The Galactic Bulge exploration VI.: Gaia Enceladus/Sausage RR Lyrae stars in the inner-central stellar halo of the Milky Way, 2025, AJ, 170, 173
35. **Prudil, Z.**, Debattista, V. P., Beraldo e Silva, L., et al.: The Galactic bulge exploration: V. The Galactic Bulge exploration V.: The secular spherical and X-shaped Milky Way bulge, 2025, A&A, 699, A349
34. **Prudil, Z.**, Kunder, A., Beraldo e Silva, L., et al.: The Galactic bulge exploration: IV. RR Lyrae stars as tracers of the Galactic bar: 3D and 5D analysis and extinction variation, 2025, A&A, 695, A211
33. **Prudil, Z.**, & Arellano Ferro, A.: On the membership of variable stars in Galactic globular clusters: the Oosterhoff gap, 2024, MNRAS, 534, 3654-3664
32. Arellano Ferro, A., et al., including **Prudil, Z.**: The Variable Stars Population of the Extended Young Globular Cluster NGC 1851, 2024, RMxAA, 60, 381-396
31. Luongo, E., et al., including **Prudil, Z.**:An 'alien' called the Oosterhoff dichotomy?, 2024, A&A, 690, L17
30. Kunder, A., **Prudil, Z.**, Skaggs, C., et al.: The Galactic Bulge Exploration. III. Calcium Triplet Metallicities for RR Lyrae Stars, 2024, AJ, 168, 139
29. Arellano Ferro, A., et al., including **Prudil, Z.**: The variable stars in the field of the bulge cluster NGC 6558, 2024, MNRAS, 532, 2159-2173
28. Zak, J., et al., including **Prudil, Z.**: Stellar obliquity measurements of six gas giants. Orbital misalignment of WASP-101b and WASP-131b, 2024, A&A, 686, A147
27. **Prudil, Z.**, Smolec, R., Kunder, A., et al.: The Galactic bulge exploration. II. Line-of-sight velocity templates for single-mode RR Lyrae stars, 2024, A&A, 685, A153
26. **Prudil, Z.**, Kunder, A., Dékány, I., et al.: The Galactic bulge exploration. I. The period-absolute magnitude-metallicity relations for RR Lyrae stars for $G_{\rm BP}$, V, G, $G_{\rm RP}$, I, J, H, and $K_{\rm s}$ passbands using Gaia DR3 parallaxes, 2024, A&A, 684, A176
25. Butler, E., Kunder, A., **Prudil, Z.**, et al.: RR Lyrae Stars Belonging to the Candidate Globular Cluster Patchick 99, 2024, ApJL, 963, L33
24. Kunder, A., **Prudil, Z.**, Covey, K. R., et al.: The Milky Way Bulge Extra-tidal Star Survey: BH 261 (AL 3), 2024, AJ, 167, 21
23. Arellano Ferro, A., **Prudil, Z.**, Yepez, M. A., et al.: Variable stars in the field of the Galactic bulge globular cluster NGC 6522, 2023, Ap&SS, 368, 91
22. Lemasle, B., et al., including **Prudil, Z.**: Tracing the Milky Way warp and spiral arms with classical Cepheids, 2022, A&A, 668, A40
21. **Prudil, Z.** et al.,: Milky Way archaeology using RR Lyrae and type II Cepheids II. Unbound RR Lyrae stars, and mass of the Milky Way, 2022, A&A, 664, A148

20. Molnár, L. et al., including **Prudil, Z.**: First results on RR Lyrae stars with the TESS space telescope: untangling the connections between mode content, colors and distances, 2021, ApJS, 258, 8
19. Braga, V. F. et al., including **Prudil, Z.**: On the Use of Field RR Lyrae as Galactic Probes. V. Optical and radial velocity curve templates, 2021, ApJ, 919, 85
18. Fabrizio, M. et al., including **Prudil, Z.**: On the use of field RR Lyrae as Galactic probes: IV. New insights into and around the Oosterhoff dichotomy, 2021, ApJ, 919, 118
17. Crestani, J. et al., including **Prudil, Z.**: On the Use of Field RR Lyrae as Galactic Probes. III. The α-element abundances, 2021, ApJ, 914, 10
16. **Prudil, Z.** et al.,: Milky Way archaeology using RR Lyrae and type II Cepheids I. The Orphan stream in 7D using RR Lyrae stars, 2021, A&A, 648, A78
15. Crestani, J. et al., including **Prudil, Z.**: On the Use of Field RR Lyrae as Galactic Probes. II. A New ΔS Calibration to Estimate Their Metallicity, 2021, ApJ, 908, 20
14. Savino, A., Koch, A., **Prudil, Z.**, Kunder, A., Smolec, R.: The age of the Milky Way inner stellar spheroid from RR Lyrae population synthesis, 2020, A&A, 641, A96
13. Bono, G. et al., including **Prudil, Z.**: On the Metamorphosis of the Bailey diagram for RR Lyrae stars, 2020, ApJL, 896, L15
12. Skarka, M., **Prudil, Z.**, Jurcsik, J.: Blazhko effect in the Galactic bulge fundamental mode RR Lyrae stars II: Modulation shapes, amplitudes and periods, 2020, MNRAS, 494, 1237
11. Hanke, M., Koch, A., **Prudil, Z.**, Grebel, E. K., Bastian, U.: Purveyors of fine halos. II. Chemodynamical association of halo stars with Milky Way globular clusters, 2020, A&A, 637, A98
10. **Prudil, Z.**, Dékány, I., Grebel, E. K., Kunder, A.: Evidence for Galactic disk RR Lyrae stars in the Solar neighborhood, 2020, MNRAS, 492, 3408
9. **Prudil, Z.**, Dékány, I., Smolec, R., Catelan, M., Grebel, E. K., Kunder, A.: Humps and bumps: The effects of shocks on the optical light curves of fundamental-mode RR Lyrae stars, 2020, A&A, 635, A66
8. **Prudil, Z.**, Dékány, I., Grebel, E. K., Catelan, M., Skarka, M., Smolec, R.: On the Oosterhoff dichotomy in the Galactic bulge: II. kinematical distribution, 2019, MNRAS, 487, 3270
7. **Prudil, Z.**, Skarka, M., Liška, J., Grebel, E. K., Lee, C.-U.: Candidates for RR Lyrae in binary systems from the OGLE Galactic bulge survey, 2019, MNRAS, 487, L1
6. **Prudil, Z.**, Dékány, I., Catelan, M., Smolec, R., Grebel, E. K., Skarka, M.: On the Oosterhoff dichotomy in the Galactic bulge: I. Spatial distribution, 2019, MNRAS, 484, 4833
5. **Prudil, Z.**, Grebel, E. K., Dékány, I., Smolec, R.,: Photometric study of the SMCNOD using variable stars from the OGLE-IV survey, 2018, MNRAS, 480, 669
4. **Prudil, Z.**, Skarka, M.: Blazhko effect in the Galactic bulge fundamental mode RR Lyrae stars I: Incidence rate and differences between modulated and non-modulated stars, 2017, MNRAS, 466, 2602
3. **Prudil, Z.**, Smolec, R., Skarka, M., Netzel, H.: Peculiar double-periodic pulsation in RR Lyrae stars of the OGLE collection - II. Short-period stars with a dominant radial fundamental mode, 2017, MNRAS, 465, 4074

2. Smolec, R., **Prudil, Z.**, Skarka, M., Bakowska, K.: Peculiar double-periodic pulsation in RR Lyrae stars of the OGLE collection - I. Long-period stars with dominant radial fundamental mode, 2016, MNRAS, 461, 2934
1. Skarka, M., Liška, J., Auer, R. F., **Prudil, Z.**, Juránová, A. Sódor, Á.: The SERMON project: 48 new field Blazhko stars and an investigation of modulation-period distribution, 2016, A&A, 592, A144

Non-refereed Publications

18. Butler, E., et al., including **Prudil, Z.**Spectroscopic follow-up of the candidate bulge globular cluster Patchick 99, 2023, AAS, 241, 402.02
17. Kunder, A., et al., including **Prudil, Z.**: A dynamical study of stars in and around the bulge globular cluster BH 261, 2023, AAS, 241, 320.03
16. Lemasle, B., et al., including **Prudil, Z.**: Galactic Cepheids as tracers of the thin disk in the Gaia area, 2022, sf2a.conf, 263-267
15. **Prudil, Z.**: The Orphan stellar stream in 7D using RR Lyrae stars, 2022, VMSAI, 2, 39
14. Molnár, L. et al., including **Prudil, Z.**: A comprehensive look at RR Lyrae stars through high-precision photometry and astrometry, 2021, in TESS Science Conference II, Zenodo
13. **Prudil, Z.**, Dékány, I., Catelan, M., Grebel, E. K., Smolec, R., Skarka, M.: Spatial and Kinematical Study of the Oosterhoff Dichotomy in the Galactic Bulge, 2021, in RR Lyrae/Cepheid 2019: Frontiers of Classical Pulsators, ed. Karen Kinemuchi, Catherine Lovekin, Hilding Neilson, and Kathy Vivas, ASPC, Vol. 529, 340
12. Jurcsik, J., Szabó, P., **Prudil, Z.**, Skarka, M., Hajdu, G.: On the Phase-Modulation Properties of Galactic Bulge RRab Stars, 2021, in RR Lyrae/Cepheid 2019: Frontiers of Classical Pulsators, ed. Karen Kinemuchi, Catherine Lovekin, Hilding Neilson, and Kathy Vivas, ASPC, Vol. 529, 329
11. Skarka M., **Prudil, Z.**, Jurcsik J.: The Blazhko Effect in Galactic Bulge Fundamental Mode RR Lyrae Stars, 2021, in RR Lyrae/Cepheid 2019: Frontiers of Classical Pulsators, ed. Karen Kinemuchi, Catherine Lovekin, Hilding Neilson, and Kathy Vivas, ASPC, Vol. 529, 130
10. **Prudil, Z.**, Smolec, R., Catelan, M., Dékány, I., Grebel, E. K., Kunder, A.: Main and Early Shocks in RR Lyrae Photometric Light Curves, 2021, in RR Lyrae/Cepheid 2019: Frontiers of Classical Pulsators, ed. Karen Kinemuchi, Catherine Lovekin, Hilding Neilson, and Kathy Vivas, ASPC, Vol. 529, 93
9. Salinas ,R., Hajdu ,G., **Prudil, Z.**, Howell ,S., Catelan, M.,: A Speckle Interferometric Search for a Companion to the RR Lyrae Star UV Oct, 2020, RNAAS, 4, 143
8. Skarka, M., **Prudil, Z.**, Liška, J.,: Binary stars with RR Lyrae components - new candidates in the Galactic bulge, 2020, in Contributions of the Astronomical Observatory Skalnate Pleso, Vol. 50, 442-445
7. Skarka, M., **Prudil, Z.**,: Photometric Differences Between Modulated and Non-Blazhko ab-type RR Lyrae Stars in the Galactic Bulge, 2018, in The RR Lyrae 2017 Conference. Revival of the Classical Pulsators: from Galactic Structure to Stellar Interior Diagnostics, ed. R. Smolec, K. Kinemuchi, & R. I. Anderson, Vol. 6, 319-320

6. **Prudil, Z.**, Grebel, E. K., Dékány, I. Smolec, R., Skarka, M.: The Oosterhoff Dichotomy in the Galactic Bulge, 2018, in The RR Lyrae 2017 Conference. Revival of the Classical Pulsators: from Galactic Structure to Stellar Interior Diagnostics, ed. R. Smolec, K. Kinemuchi, & R. I. Anderson, Vol. 6, 37-41
5. Skarka M., et al., including **Prudil, Z.**: CzeV - The Czech Variable Star Catalogue, 2017, OEJV, 185, 1
4. Smolec, R. et al., including **Prudil, Z.**: Petersen diagram revolution, 2017, in Wide-Field Variability Surveys: A 21st Century Perspective - 22nd Los Alamos Stellar Pulsation - Conference Series Meeting, San Pedro de Atacama, Chile, Edited by Catelan, M.; Gieren, W.; EPJ Web of Conferences, Volume 152, id.06003
3. **Prudil, Z.**: Multiple variability in RR Lyrae stars, 2017, in proceedings of the 48th conference on Variable Stars Research, Open European Journal on Variable Stars, 180, 47
2. **Prudil, Z.**, Skarka, M., Zejda, M.: Analysis of light curve of LP Camelopardalis, 2016, Commmunications of the Konkoly Observatory Hungary, 105, 213
1. Liška, J., Skarka, M., Auer, R. F., **Prudil, Z.** & Juránová, A.,: Possible candidates for multiple occurrence of variable stars in the VSX catalogue, 2015, OEJV, 170, 1