

# Mgr. Alžběta Oplištilová – CV

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**Born** November 25, 1996, in Prague, the Czech Republic  
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## Education

- Oct. 2021–present** Doctoral studies, Astronomical Institute of Charles University, Faculty of Mathematics and Physics  
assigned thesis: *Stars at a glance: with high-resolution spectroscopy and long-baseline interferometry*  
supervised by doc. Mgr. Miroslav Brož, Ph.D., co-supervised by prof. RNDr. Petr Harmanec, DrSc.
- 2019–2021** Master's studies, Astronomical Institute of Charles University, Faculty of Mathematics and Physics  
thesis: *Spectroscopic and photometric investigation of selected hot stars*  
supervised by prof. RNDr. Petr Harmanec, DrSc.
- 2016–2019** Bachelor's studies, General Physics at Charles University, Faculty of Mathematics and Physics  
thesis: *An analysis and solution of the light curves of the massive triple star delta Orionis*  
supervised by prof. RNDr. Petr Harmanec, DrSc.
- 2012–2016** Českolipská grammar school in Střížkov, Prague  
with extended courses in mathematics and physics

## Trainee work experience

- 2018–present** Non-academical employee at Astronomical Institute of Charles University  
→ analysis of multiple star systems using programs Xitau, PHOEBE 2, and KOREL
- Nov. 2022–Oct. 2023** ESO Studentship Programme (supervisor: Ch. Hummel, co-supervisors: A. Mérand, H. Boffin)  
→ reduction and analysis of interferometric data  
→ organising ESO Informal Discussions and Student Organised Sessions  
→ Scientific Assistant for panel meeting of Observing Programmes Committee (111<sup>th</sup> and 112<sup>th</sup>)  
→ talks at Journal Club, Informal Discussion, Stellar Coffee, Student Organised Session
- June–July 2022** Preparation of S06 programme for CHARA/SPICA interferometer, testing run in the CERGA Observatory  
→ selection of appropriate objects for CHARA/SPICA observations → search for fringes in the new interferometer
- 2019, 2020** UBVR measurement at Hvar Observatory for GA ČR grant (19-01995S)  
→ photometric measurements with a 65-cm Cassegrain telescope

## International conferences

- Hvar Stellar Meeting 2023, Hvar, Croatia, 18-22 September 2023: contributed talk
- 3,2,1: Massive Triples, Binaries and Mergers 2023, Leuven, Belgium, 17-21 July 2023: contributed talk
- European Astronomical Society Annal Meeting, Krakow, Poland, 10-14 July 2023: e-poster
- Universe of Binaries, Telč, Czech Republic, 7-11 September 2019: contributed talk

## Workshops

- The 11th VLTI Interferometry School in Budapest, Hungary, 12-17 June 2023
- Echelle and RVs workshop in Ondřejov (IRAF), the Czech Republic, 22-26 August 2022
- Virtual workshop PHOBE 2, 22 June-3 July 2021
- Non-official PHOEBE 2 workshop led Piotr A. Kołaczek-Szymański, Wrocław, Poland, 1-6 March 2020

## Local organising committee

- Hvar Stellar Meeting 2023, Hvar, Croatia, 18-22 September 2023
- Coordinated Surveys of the Southern Sky, ESO Garching, Germany, 27 February-3 March 2023
- Peer Review Under Review, ESO Garching, Germany, 6-10 February 2023
- Hinode-15 / IRIS-12 meeting, Prague, the Czech Republic, 19-23 September 2022

## Grants

- 2019–2022, GA ČR** Studying long-term variability and duplicity of individual classical as well as other Be stars with multi-technique observations, principal researcher: prof. RNDr. Petr Harmanec, DrSc.
- 2020–2021, SFG** The finalization of accompanying graphics to the textbook for the subject Cosmic Electrodynamics
- 2019–2020, SFG** The editing of the textbook for the subject Cosmic Electrodynamics (Python programming)
- 2018–2019, SFG** An attempt to find the spectral lines of the secondary component of a massive eclipsing binary  $\delta$  Orionis
- 2017–2018, SFG** Measurement of microluminescence in semi-insulating CdZnTe and CdZnSeTe
- 2017, SFG** Influence of the surface hydrophobicity for drop coating deposition Raman spectroscopy

## Astronomical codes

- PHOEBE 2
- KOREL
- IRAF
- ASPRO, LITpro
- PMOIRE, CANDID
- Oyster

## Language skills

- Czech – C2
- English – B2-C1
- German – B1
- Slovak – passive

## General computer skills

- Unix and Windows
- Python
- Gnuplot, LaTeX, HTML
- AWK, Bash
- basic Pascal, IDL, Fortran, Matlab, R
- MS Office

## Publications

- A. Oplištilová, P. Mayer, P. Harmanec, M. Brož, A. Pigulski, H. Božić, P. Zasche, M. Šlechta, H. Pablo, P. A. Kołaczek-Szymański, A. F. J. Moffat, C. C. Lovekin, G. A. Wade, K. Zwintz, A. Popowicz, and W. W. Weiss. Spectrum of the secondary component and new orbital elements of the massive triple star  $\delta$  Ori A. *A&A*, 672:A31, April 2023. doi: 10.1051/0004-6361/202245272.
- A. Oplištilová, P. Harmanec, P. Mayer, P. Zasche, M. Šlechta, H. Pablo, A. Pigulski, and BRITE Team. Improved model of delta orionis. *Contributions of the Astronomical Observatory Skalnaté Pleso*, 50, 03 2020. doi: 10.31577/caosp.2020.50.2.585.

## Co-authorships

- P. Harmanec, H. Božić, P. Koubský, S. Yang, D. Ruždjak, D. Sudar, M. Šlechta, M. Wolf, D. Korčáková, P. Zasche, A. Oplištilová, D. Vršnak, H. Ak, P. Eenens, H. Bakış, V. Bakış, S. Otero, R. Chini, T. Demsky, B. N. Barlow, P. Svoboda, J. Jonák, K. Vitovský, and A. Harmanec. V1294 Aql = HD 184279: A bad boy among Be stars or an important clue to the Be phenomenon? *Astronomy & Astrophysics*, 666:A136, October 2022. doi: 10.1051/0004-6361/202244006.
- M. Wolf, P. Harmanec, H. Božić, P. Koubský, S. Yang, D. Ruždjak, M. Šlechta, H. Ak, H. Bakış, V. Bakış, A. Oplištilová, and K. Vitovský. Long-term, orbital, and rapid variations of the Be star V923 Aql = HD 183656. *Astronomy & Astrophysics*, 647:A97, March 2021. doi: 10.1051/0004-6361/202039740.