JORDAN B. S. VAN BEECK

Asteroseismology | Stellar Astrophysics | FOSS



SCIENTIFIC EDUCATION

Ph.D., Astronomy & Astrophysics, KU Leuven (Belgium), September 2023

**Asteroseismology of Kepler B stars: internal magnetism and non-linear mode coupling

**Promoters: Prof. Dr. C. Aerts, Prof. Dr. T. Van Hoolst, Prof. Dr. D. M. Bowman (thesis download link)

M.Sc., Astronomy & Astrophysics, KU Leuven (Belgium), July 2019 - Magna Cum Laude
The influence of an interior magnetic field on gravity-mode oscillations of intermediate-mass stars

Promoters: Prof. Dr. C. Aerts, Dr. T. Van Reeth, Prof. Dr. D. M. Bowman (thesis download link)

M.Sc., Chemistry, University of Antwerp (Belgium), September 2017 – Magna Cum Laude Characterization of radioactive particles

Promoters: Prof. Dr. K. Janssens, Prof. Dr. B. Salbu, Prof. Dr. O.-C. Lind, M.Sc. G. Nuyts

B.Sc., Chemistry, University of Antwerp (Belgium), September 2015 – Magna Cum Laude Atomic scale reactive MD studies of DNA oxidation for plasma oncology: the role of H₂O₂ and HO₂

Promoters: Prof. Dr. A. Bogaerts, Prof. Dr. E. Neyts, Dr. C. Verlackt

EMPLOYMENT

KU Leuven, Department of Physics and Astronomy, Institute of Astronomy, Leuven, Belgium Research Associate, Asteroseismology, September 2023 – December 2023 Project: non-linear asteroseismic modeling of slowly pulsating B stars

Funded by the European Union (ERC, 4D-STAR, N° 101071505). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Council Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.





AWARDS AND FELLOWSHIPS

2021 - 2022	FWO (Research Foundation Flanders) long research stay grant (€12 738) for
	a stay as a VSR at TAPIR, Caltech, CA, USA with Prof. Dr. J. Fuller.
2019 - 2023	4-year PhD Fellowship, Department of Physics & Astronomy, KU Leuven
2019	Paul Smeyers Prize, KU Leuven
	Awarded to the annual best master's thesis in Astronomy & Astrophysics at the June examination session.

TEACHING EXPERIENCE

Teaching Assistant, Department of Physics & Astronomy, KU Leuven

2022 - 2023 K01B4A: 'Natuurkunde met elementen van wiskunde' I (taught in Dutch)
(Introductory physics course for the first-year students in the B.Sc. of pharmaceutical sciences)

2019 - 2021 K01B4A|B:'Natuurkunde met elementen van wiskunde' I|II (taught in Dutch)
English translation of course title: 'Physics with elements of mathematics' I|II
(Introductory physics courses for the first-year students in the B.Sc. of pharmaceutical sciences)

VISITING RESEARCH POSITIONS (ABRIDGED)

11/2021 - 06/2022 | Visiting Student Researcher (VSR) at TAPIR, Caltech, CA, USA

Project goal: development of computational tools that aid in explaining oscillation mode

amplitude limitation in slowly pulsating B stars

Mentor: Prof. Dr. J. Fuller Funding: FWO long research stay grant

11/2021 - 12/2021 | Transport in Stellar Interiors Program Affiliate (workshop, conference) at

KITP, UC Santa Barbara, CA, USA

Mentor: Prof. Dr. L. Bildsten Funding: FWO long research stay grant

SEMINARS/CONFERENCE PRESENTATIONS (ABRIDGED)

March 2023 | GOOD VIBRATIONS SEMINAR (https://youtu.be/dWaEkri_s2I?feature=shared)

The Good Vibrations seminar series, S3E8.

February 2023 | AD-VALVAS SEMINAR (https://youtu.be/nTWZoLCMa_g?feature=shared)

Ad-valvas seminar of the Institute of Astronomy, KU Leuven, Belgium.

July 2022 POSTER PRESENTATION (additional info: doi:10.5281/zenodo.6814504)

TASC6 / KASC13 workshop/conference at KU Leuven, Belgium.

November 2021 | CONTRIBUTED TALK (doi:10.26081/K6VH15)

Transfer in Stellar Interiors conference (part of the Probes of Transport in Stars program),

KITP, UC Santa Barbara, CA, USA.

July 2020 | CONTRIBUTED TALK (doi:10.5281/zenodo.5525346)

MOBSTER-1 Virtual conference 2020: Stellar variability as a probe of magnetic fields in

massive stars (online, hosted by University of Delaware, DE, USA)

PROFESSIONAL ACTIVITIES

Conference organization

July 2022 Member of the Local Organizing Committee

TASC6 / KASC13 workshop/conference in Leuven, Belgium

Professionally associated as

Fellow (Graduate Student)

2022 Royal Astronomical Society (RAS)

Graduate Student Member

2020 - 2022 American Astronomical Society (AAS)

2020 - 2022 Royal Netherlands Astronomical Society (KNA)

2019 - 2023 International Research Network for Nuclear Astrophysics (IReNA)

DIGITAL PROFICIENCY





Scientific Software