Earl Patrick Bellinger, Ph.D.

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Interests Astrophysics, stellar evolution, asteroseismology, artificial intelligence, machine learning, data science

Position

Postdoctoral Research Fellow, Stellar Astrophysics Centre, Aarhus University, Denmark 2018 – 2021

Education

Ph.D. Computer Science, University of Göttingen, Germany 2018
M.Sc. Computer Science, Indiana University, USA (GPA: 3.95/4.0) 2014
B.Sc. Computer Science, SUNY Oswego, USA (GPA: 3.81/4.0, ranked #1 overall) 2012
B.Sc. Applied Mathematics, SUNY Oswego, USA (*summa cum laude*) 2012

Past Research Positions

Research Assistant, **Max Planck Institute for Solar System Research**, Germany 2015 – 2018
Visiting Assistant in Research, **Yale University**, USA 2016 – 2017
Research Assistant, **Indiana University**, USA 2013 – 2015
Guest Researcher, **NIST Information Technology Laboratory**, USA 2013 – 2014
Research Student, **National Institute of Informatics**, Japan 2013
SURF Fellow, **NASA Jet Propulsion Laboratory**, USA 2012
REU Student, **Federal University of Alagoas**, Brazil 2011
REU Student, **Federal University of Santa Catarina**, Brazil 2010

Teaching Positions

Teaching Assistant, Department of Astronomy, **Yale University**, USA 2017
Assistant, Institute for Astrophysics, **University of Göttingen**, Germany 2016
Associate Instructor, School of Informatics & Computing, **Indiana University**, USA 2012
Seminar Leader, Honors Department, **SUNY Oswego**, USA 2010

Selected Honors & Awards

Stellar Astrophysics Centre Postdoctoral Fellowship 2018 – 2021
National Physical Science Consortium Graduate Fellowship 2012 – 2017
SUNY Oswego Presidential Scholarship 2008 – 2012
Oebele Van Dyk Outstanding Computer Science Senior Award 2012
SUNY Chancellor's Award 2012
SUNY Oswego Student/Faculty Collaborative Challenge Grant 2011
NSF IRES / SUNY Oswego Global Laboratory Scholarship 2010, 2011
SMART Grant 2010, 2011

Publishing 20 publications (10 first author), 118 citations, h-index of 6, Erdős number of 3

Selected Scientific Articles

Bellinger, E. P., Hekker, S., Angelou, G. C., Stokholm, A., Basu, S. (2018). Stellar ages, masses and radii from asteroseismic modelling are robust to systematic errors in spectroscopy. *Astronomy & Astrophysics*, accepted.

Bellinger, E. P., Basu, S., Hekker, S., Ball, W. (2018). Model-independent measurement of internal stellar structure in 16 Cygni A and B. *The Astrophysical Journal*, 851 (2), 80.

Bellinger, E. P., Angelou, G. C., Hekker, S., Basu, S., Ball, W., Guggenberger, E. (2016). Fundamental Parameters of Main-Sequence Stars in an Instant with Machine Learning. *The Astrophysical Journal*, 830 (1), 20.

Bellinger, E. P., Conner, D., Mittman, D., Magee, K., & Heventhal, B. (2012). CASSIUS: the Cassini Uplink Scheduler. *Jet Propulsion Laboratory: National Aeronautics and Space Administration.*

Angelou, G. C., **Bellinger, E. P.**, Hekker, S., Basu, S. (2017). On the Statistical Properties of the Lower Main Sequence. *The Astrophysical Journal*, 839 (2), 116.

Guggenberger, E., Hekker, S., Basu, S., **Bellinger, E. P.** (2016). Significantly improving stellar mass and radius estimates: A new reference function for the $\Delta\nu$ scaling relation. *Monthly Notices of the Royal Astronomical Society*, 461 (2).