Curriculum Vitae for Kasper Elm Heintz

Personal data: Full name: Kasper Elm Heintz

Date of birth: April 18, 1991

Nationality: Danish Wife: Julie Elm Heintz

Children: Oliver Elm Heintz (b. 2016) and Alfreð Elm Heintz (b. 2020)

E-mail: keh14@hi.isPhone: $+45\ 2382\ 4056$

Position(s): Postdoctoral researcher,

Centre for Astrophysics and Cosmology, Science Institute, University of Iceland

Instrument Scientist for the NOT Transient Explorer (NTE; nte.nbi.ku.dk)

Education: 2016 - 2019: PhD in astrophysics, University of Iceland, Iceland

(supervisor: Páll Jakobsson)

2014 - 2016: MA in astrophysics, University of Copenhagen, Denmark

(supervisor: Johan P. U. Fynbo).

2011 - 2014: BA in physics with specialization in astronomy, University of

Copenhagen, Denmark (supervisor: Steen H. Hansen). 2007 - 2010: High-school, Gladsaxe Gymnasium, Denmark.

Interests: Kilonovae, gamma-ray bursts, quasars, damped Lyman- α absorbers, fast

radio bursts

Publications: My publication record include 12 referred publications as first author cur-

rently listed in the Astronomical Data System (ADS) and 31 refereed pu-

blications as co-author. These include 4 papers in *Nature*.

h-index (number of publications with more than h citations): 15

Selected publications:

- Heintz et al. 2019, A&A, 621, 20: Cold gas in the early Universe. Survey for neutral atomic-carbon in GRB host galaxies at 1 < z < 6 from optical afterglow spectroscopy

- Heintz et al. 2018, MNRAS, 479, 3456: Highly ionized metals as probes of the circumburst gas in the natal regions of gamma-ray bursts

- Heintz et al. 2018, A&A, 615, A43: A quasar hiding behind two dusty absorbers. Quantifying the selection bias of metal-rich, damped $Ly\alpha$ absorption systems

The full publication list is attached in a separate document.

Expertise: Observing: I have so far observed 5 times with the Nordic Optical Telescope

(NOT) and 1 time with the New Technology Telescope (NTT) at the ESO La Silla observatory. I have observed remotely several times, typically a few nights per month on duty for the various FRB, GRB or GW collaborations. This includes submitting triggers and observing with the NOT, VLT, Gemini,

NTT, and the space-based HST.

<u>Data analysis</u>: I have experience with UV/optical imaging and spectroscopic data reduction and analysis, in addition to ALMA observing preparation and

data analysis. I am also co-developer of a spectroscopic reduction package (public available here: github.com/keheintz/PyReduc).

Programming languages: IDL, Python

- Collaborations: Hunting for the most exotic gamma-ray bursts with the VLT (STARGATE)
 - Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope (ENGRAVE)
 - The extended Public ESO Spectroscopic Survey for Transient Objects (ePESSTO)
 - Fast and Fortunate for FRB Follow-up (F⁴)
 - The Commensal Real-time ASKAP Fast Transients Survey (CRAFT)
 - Real-time, Commensal Fast Transient Surveys with the Very Large Array (realfast)

Teaching:

2019: Introduction to physics, Teachers Assistant, University of Iceland

2018: Spacetime physics, Teachers Assistant, University of Iceland

2018: Introduction to physics, Teachers Assistant, University of Iceland

2018: Co-supervisor on 3 first-year projects, University of Copenhagen

2015: Observational astrophysics, Teachers Assistant, University of Copen-

hagen

Outreach:

I enjoy and make an effort to speak to the general public as often as possible, typically 5 – 10 times a year. I have also featured in a few press releases related to the work done as part of my PhD project, most notably in the Icelandic news paper Vísir (www.visir.is) and the University of Iceland press.