Kaustubh Hakim

PERSONAL INFORMATION

Male, November 22, 1988 hakim.kaustubh@gmail.com http://www.exokaustubh.com Science Park 904 1098 GE Amsterdam The Netherlands

EDUCATION

VU University and University of Amsterdam, The Netherlands

Sep. 2014–present

Ph.D. Astrophysics (expected)

Supervisors: Prof. Carsten Dominik, *University of Amsterdam* and Prof. Wim van Westrenen, *VU University Amsterdam*

Thesis: High-pressure laboratory experiments to study the interior of rocky exoplanets

 \mathbf{KU} Leuven, Belgium

Sep. 2012–July 2014

M.Sc. (magna cum laude), Astronomy and Astrophysics

Supervisor: Prof. Tim Van Hoolst, KU Leuven / Royal Observatory Brussels (ROB)

Thesis: The interior structure of super-Earths

Indian Institute of Technology Kharagpur, India

Aug. 2006–July 2010

B.Tech. (Honours), Electronics and Electrical Communication Engineering

Supervisor: Prof. Raja Datta, IIT Kharagpur

Thesis: Performance Evaluation of s-MAC protocol for Wireless Sensor Networks (WSN)

RESEARCH EXPERIENCE Nicolaus Copernicus Astronomical Center, Warsaw, Poland

Supervisor: Dr. Alexis Smith

July 2014-Aug. 2014

Data reduction pipeline of Canada-France-Hawaii-Telescope for SuperWASP exoplanets

Mercator Telescope, Roques de las Mouchachos Observatory, La Palma, Spain

Supervisors: Prof. Hans van Winckel, Dr. Andrew Tkachenko

Oct. 2013–Dec. 2013

Spectroscopic study of three Kepler planet candidates

Belgian Institute for Space Aeronomy (BIRA), Brussels, Belgium

Supervisor: Dr. Johan de Keyser

Mar. 2013–June 2013

Study of Earth's magnetopause based on the data from Ampte/IRM and Cluster spacecrafts

CONFERENCE TALKS Hakim, K.; van Westrenen, W.; Dominik, C., High-pressure experiments to probe the interior of small rocky exoplanets, 2016, Netherlands Geology Congress, Veldhoven, The Netherlands (7-8 April 2016).

Hakim, K.; van Westrenen, W.; Dominik, C., High-pressure experiments to probe the interior of carbide exoplanets, 2015, *Exoplanets in Lund*, Lund, Sweden (6-8 May 2015).

Conference Posters Hakim, K.; van Westrenen, W.; Dominik, C., High-pressure-temperature experiments to probe the interior of small rocky exoplanets, 2015, Exploring The Universe With James Webb Space Telescope, ESA-ESTEC, The Netherlands (12-16 October 2015).

Van Hoolst, T.; Rivoldini, A.; Hakim, K.; Jaeken, J.; Cottenier, S., High-pressure equations of state for iron and the interior structure of super-Earths, 2014, European Planetary Science Congress, Cascais, Portugal (7-12 September 2014).

Hakim, K.; Van Hoolst, T.; Rivoldini, A.; Cottenier, S., The interior structure of super-Earths, 2014, the 69th *Dutch Astronomy Conference*, Noordwijk, The Netherlands (19-21 May 2014).

WORKSHOPS

45th Saas-Fee course on From Protoplanetary Disks to Planet Formation, Swiss Society for Astrophysics and Astronomy (SSAA), Les Diablerets, Switzerland (15-20 March 2015).

Nederlandse Onderzoekschool voor de Astronomie (NOVA) Fall School in Astronomy, Dwingeloo, The Netherlands (6-10 October 2014).

Application of X-ray metrology for material science research, University of Twente, Enschede, The Netherlands (1-2 October 2015).

INDUSTRY EXPERIENCE

Nomura, Mumbai, India – Analyst

July 2010-Aug. 2012

Assigned the ownership and maintenance of Risk Engine, a **trade monitoring** tool for Equities Division of Nomura-Global. Regularly attended **business calls** with traders to understand their business requirements and provided a user friendly interface with the help of Java, SQL and Shell.

IBM, Bangalore, India – Trainee

May 2009–July 2009

Developed the MisCompare Analysis Tool (MCAT) for the **hardware verification** of PowerPC FPU pseudo-random instruction streams using C and Shell. Was offered a **Pre-Placement Offer** to join IBM after graduation.

Omega Electronics, Jaipur, India – Trainee

May 2008–July 2008

Drafted a new design for ETB-246, an educational training kit explaining the working of transformers. Did a live video demonstration describing the features of Radio frequency identification (RFID-1015) kit for the **Sales division**.

TATA Power, Mumbai, India – Trainee

May 2007-June 2007

Analyzed the calibration process of the transmitters used for pressure and temperature measurement in the two coal-based units of the 1580 MegaWatt thermal power station.