Kaustubh Hakim

PERSONAL INFORMATION

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

EDUCATION

Ph.D., Astrophysics (expected), University of Amsterdam, The Netherlands

Sep. 2014 – present

Supervisors: Prof. Carsten Dominik, University of Amsterdam & Prof. Wim van Westrenen, Vrije University Amsterdam Thesis: The mineralogy and structure of rocky exoplanets

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

Sep. 2012 – July 2014

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

Thesis: The interior structure of super-Earths

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

Technology Kharagpur, India

Aug. 2006 - July 2010

Supervisor: Prof. Raja Datta, IIT Kharagpur

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

RESEARCH EXPERIENCE

July – Aug. 2014, Nicolaus Copernicus Astronomical Center, Warsaw, Poland

Supervisor: Dr. Alexis Smith

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

Oct. – Dec. 2013, Mercator Telescope, Roques de las Mouchachos Observatory, La Palma, Spain

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

Spectroscopic study of three Kepler planet candidates

Mar. – June 2013, Belgian Institute for Space Aeronomy, Brussels, Belgium

Supervisor: Dr. Johan de Keyser

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

TEACHING/ SUPERVISION EXPERIENCE

2015-2017, Teaching Assistant for Interstellar and Circumstellar Matter, MSc in Astronomy & Astrophysics, University of Amsterdam

Feb. – July 2016, *Primary Supervisor* of Rob Spaargaren for his Bachelor Thesis which led to the attainment of a double BSc degree in Earth Sciences and Physics & Astronomy at Vrije University Amsterdam

SERVICE/ ORGANIZATIONAL WORK

Sep. 2016 – Sep. 2017, *PhD Representative*, PhD-PostDoc Council, API Institute for Astronomy, University of Amsterdam

13 May 2015, Organizer, Planetary and Exoplanetary Science Network (PEPSci) PhD-PostDoc Meeting, University of Amsterdam

Sep. 2012 – July 2014, Student Representative, Permanent Education Committee, MSc course in Astronomy and Astrophysics, KU Leuven

Kaustubh Hakim

INDUSTRY EXPERIENCE

July 2010 – Aug. 2012, Nomura, Mumbai, India – Analyst

Product ownership and software development of an Equities trade monitoring tool used by traders and clients worldwide.

May 2009 – July 2009, IBM, Bangalore, India – Trainee

Software development of MisCompare Analysis Tool for the hardware verification of IBM PowerPC.

May 2008 – July 2008, Omega Electronics, Jaipur, India – Trainee

Designed an RFID based educational training kit and performed a product video demonstration for the Sales division.

May 2007 - June 2007, TATA Power, Mumbai, India - Trainee

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.

PUBLICATIONS

Hakim, K., van Westrenen, W. and Dominik, C. (in preparation). A laboratory approach to probe the mineralogy of carbon-enriched rocky exoplanets.

Hakim, K., Rivoldini, A., Cottenier, S., Van Hoolst, T., Chust, T. and Steinle-Neumann, G. (in preparation). A new ab initio equation of state of hcp-Fe and its application to the interior structure and mass-radius relation of rocky super-Earths.

Conference Contributions

Mar. 2017, Formation and Dynamical Evolution of Exoplanets, Aspen, Colorado, USA (Talk)

Mar. 2017, the 48th Lunar and Planetary Science Conference, Houston, Texas, USA (Talk)

May 2016, the 71st Netherlands Astronomy Conference, Nunspeet, The Netherlands (Talk)

Apr. 2016, the 13th Netherlands Geology Congress, Veldhoven, The Netherlands (Talk)

May 2015, Exoplanet Conference, Lund, Sweden (Talk)

Oct. 2015, Exploring The Universe With James Webb Space Telescope, ESA-ESTEC, Noordwijk, The Netherlands (Poster)

Sep. 2014, European Planetary Science Congress, Cascais, Portugal (Poster)

SEMINARS

Apr. 2017, Department of Geophysics, University of Chicago, Chicago, Illinois, USA

Aug. 2016, Department of Physics and Astronomy, University of Los Andes, Bogotá, Colombia

WORKSHOPS

Oct. 2015, Application of X-ray metrology for material science research, University of Twente, Enschede, The Netherlands

Mar. 2015, 45th Saas-Fee course on From Protoplanetary Disks to Planet Formation, Swiss Society for Astrophysics and Astronomy, Les Diablerets, Switzerland

Oct. 2014, NOVA Fall School in Astronomy, Dwingeloo, The Netherlands