
**PERSONAL
INFORMATION**

Email: hakim.kaustubh@gmail.com
Webpage: <http://www.exokaustubh.com>
Phone: +31-20-525-8476
Citizenship: Indian

API Institute for Astronomy
University of Amsterdam
Science Park 904
1098 XH Amsterdam, Netherlands

EDUCATION

Sep. 2014 – present, Ph.D. (expected), Astrophysics, University of Amsterdam, The Netherlands
Supervisors: Prof. Carsten Dominik & Prof. Wim van Westrenen
Thesis: Mineralogy and structure of rocky exoplanets

Sep. 2012 – July 2014, M.Sc., Astronomy & Astrophysics, KU Leuven, Belgium
Supervisors: Prof. Tim Van Hoolst & Dr. Attilio Rivoldini
Thesis: The interior structure of super-Earths

Aug. 2006 – July 2010, B.Tech., Electronics Engineering, IIT Kharagpur, India
Supervisor: Prof. Raja Datta
Thesis: s-MAC protocol for Wireless Sensor Networks

DISTINCTIONS

July 2014, Graduated M.Sc. degree with *magna cum laude*, KU Leuven

July 2010, Graduated B.Tech. degree with *Honours*, IIT Kharagpur

Apr. 2006, Secured 99.9 percentile among 0.5 million candidates in all-India engineering entrance examinations, IIT-JEE and AIEEE

**PUBLICATIONS
(REFEREED)**

Hakim, K., van Westrenen, W. and Dominik, C. (under revision, *EPSL*). A laboratory approach to probe the mineralogy of carbon-rich rocky exoplanets.

Hakim, K., Rivoldini, A., Van Hoolst, T., Cottenier, S., Jaeken, J., Chust, T. and Steinle-Neumann, G. (submitted, under review, *Icarus*). 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.

Hakim, K., van Westrenen, W. and Dominik, C. (in preparation). Instability of silicon carbide in rocky exoplanets.

**PUBLICATIONS
(NON-REFEREED)**

Hakim, K., van Westrenen, W. and Dominik, C. Mineralogy of Carbon-Enriched Rocky Extra-Solar Planets from Laboratory Experiments. Lunar Planetary Science Conference, 48th meeting, # 2259.

Hakim, K., Rivoldini, A., Cottenier, S., Van Hoolst, T., Chust, T. and Steinle-Neumann, G. A New Ab Initio Equation of State of hcp-Iron and Its Application to the Interior Structure of Rocky Super-Earths. Lunar Planetary Science Conference, 48th meeting, # 2279.

**COMPUTATIONAL
SKILLS**

Languages: Python, Shell scripting, Java, MySQL, C, Fortran90

Software: Mathematica, MATLAB

**TEACHING/
SUPERVISION
EXPERIENCE**

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

Feb. – July 2016, *Primary Supervisor* for the Bachelor thesis of Rob Spaargaren, led to cum laude double BSc in Earth Sciences and Physics & Astronomy, Vrije University Amsterdam

SELECTED CONFERENCE TALKS	Apr. 2017, Formation and Dynamical Evolution of Exoplanets, Aspen, Colorado, USA Mar. 2017, the 48th Lunar and Planetary Science Conference, Houston, Texas, USA May 2016, the 71st Netherlands Astronomy Conference, Nunspeet, The Netherlands Apr. 2016, the 13th Netherlands Geology Congress, Veldhoven, The Netherlands May 2015, Exoplanet Conference, Lund, Sweden
SEMINAR	Apr. 2017, Department of Geophysics, University of Chicago, Chicago, Illinois, USA
ADVANCED TRAINING COURSES	July 2016, New Directions in Planet Formation, Lorentz Center, Leiden, The Netherlands Oct. 2015, Application of X-ray metrology for material science research, University of Twente, Enschede, The Netherlands Mar. 2015, the 45th Saas-Fee course on From Protoplanetary Disks to Planet Formation, Swiss Society for Astrophysics & Astronomy, Les Diablerets, Switzerland
SERVICE/ ORGANIZATIONAL WORK	Sep. 2016 – Sep. 2017, <i>PhD Representative</i> , PhD-PostDoc Council, API Institute for Astronomy, University of Amsterdam May 2015, <i>Organizer</i> , Planetary and Exo-Planetary Science Network (NWO-PEPSci) PhD-PostDoc Meeting, University of Amsterdam Sep. 2012 – July 2014, <i>Student Representative</i> , Permanent Education Committee, MSc in Astronomy and Astrophysics, KU Leuven
SCIENCE COMMUNICATION/ OUTREACH	Mar. 2017, Participated in FameLab Amsterdam – a science communication workshop and competition Aug. 2016, Gave a science talk for bachelor students at University of Los Andes, Bogotá, Colombia Oct. 2014–2016, Volunteered during Public Science Day, University of Amsterdam, The Netherlands
FORMER RESEARCH EXPERIENCE	July – Aug. 2014, Nicolaus Copernicus Astronomical Center, Warsaw, Poland Data reduction pipeline of <i>Canada-France-Hawaii-Telescope</i> for <i>SuperWASP</i> exoplanets Sep. – Oct. 2013, Mercator Telescope, Roque de las Muchachos Observatory, La Palma, Spain Spectroscopic study of three <i>Kepler</i> planet candidates Mar. – June 2013, Belgian Institute for Space Aeronomy, Brussels, Belgium Study of Earth's magnetopause based on the data from <i>Ampte/IRM</i> and <i>Cluster</i> spacecrafts
INDUSTRY EXPERIENCE	July 2010 – Aug. 2012, <i>Analyst</i> at Nomura, Mumbai, Product development and maintenance for global equities trade monitoring tools May–July 2007–2009, <i>Summer Traineeships</i> at IBM, Bangalore (2009), Omega Electronics, Jaipur (2008) and TATA Power, Mumbai (2007)