

PERSONAL INFORMATION

November 22, 1988
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Science Park 904
1098 XH Amsterdam
The 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. (magna cum laude), 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. (Honours), Electronics Engineering, IIT Kharagpur, India
Supervisor: Prof. Raja Datta
Thesis: s-MAC protocol for Wireless Sensor Networks

PUBLICATIONS (REFEREED)

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

Hakim, K., Rivoldini, A., Van Hoolst, T., Cottenier, S., Jaeken, J., Chust, T. and Steinle-Neumann, G. (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 carbon-enriched 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.

SERVICE/ ORGANIZATIONAL WORK

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

May 2015, *Organizer*, Planetary and Exo-Planetary Science Network (NWO-PEPSci) PhD-PostDoc Meeting, University of Amsterdam

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

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

PUBLIC OUTREACH

Aug. 2016, Talk for bachelor students, University of Los Andes, Bogotá, Colombia

Oct. 2014 – 2016, Volunteer during Open Science Day, University of Amsterdam, The Netherlands

Sep. – Nov. 2014, Volunteer for Stargazing Nights, API Institute for Astronomy, The Netherlands

SELECTED WORKSHOPS

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

FORMER 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

Sep. – Oct. 2013, Mercator Telescope, Roque 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

INDUSTRY EXPERIENCE

July 2010 – Aug. 2012, *Analyst*, Nomura, Mumbai, India
Product development based on *Java*, *Adobe Flex*, *Shell* scripting and database management with *MySQL* for global equities trade monitoring

May 2009 – July 2009, *Trainee*, IBM, Bangalore, India
Software development based on *C* for the hardware verification of IBM PowerPC

May 2008 – July 2008, *Trainee*, Omega Electronics, Jaipur, India
Development and demonstration of a sales video for a RFID-based educational training kit

May 2007 – June 2007, *Trainee*, TATA Power, Mumbai, India
Analysis of the pressure-temperature calibration process of the transmitters of power station