

## PERSONAL INFORMATION

Male, November 22, 1988  
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Science Park 904  
1098 XH Amsterdam  
The Netherlands

## EDUCATION

**University of Amsterdam** and **VU University**, 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

**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, the 71st *Netherlands Astronomy Conference*, Nunspeet, The Netherlands (23-25 May 2016).

**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).

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<b>STUDENTS</b>	<i>Primary Supervisor</i> of <b>Rob Spaargaren</b> , Department of Earth Sciences and Department of Physics and Astronomy, VU University Amsterdam Feb.–July 2016 Double Bachelor Thesis: An experimental approach to study the interior of carbon-rich rocky exoplanets
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<b>WORKSHOPS</b>	45th Saas-Fee course on <b>From Protoplanetary Disks to Planet Formation</b> , Swiss Society for Astrophysics and Astronomy (SSAA), Les Diablerets, Switzerland (15-20 March 2015).  Nederlandse Onderzoekschool voor de Astronomie ( <b>NOVA</b> ) <b>Fall School in Astronomy</b> , Dwingeloo, The Netherlands (6-10 October 2014).  Application of <b>X-ray metrology for material science research</b> , University of Twente, Enschede, The Netherlands (1-2 October 2015).
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<b>OUTREACH TALKS</b>	<b>The interior of carbon-rich rocky exoplanets</b> , University of Los Andes, Bogotá, Colombia (10 August 2016).
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<b>INDUSTRY EXPERIENCE</b>	<b>Nomura</b> , Mumbai, India – <i>Analyst</i> July 2010–Aug. 2012 Assigned the ownership and maintenance of Risk Engine, a <b>trade monitoring</b> tool for Equities Division of Nomura-Global. Regularly attended <b>business calls</b> with traders to understand their business requirements and provided a user friendly interface with the help of Java, SQL and Shell.  <b>IBM</b> , Bangalore, India – <i>Trainee</i> May 2009–July 2009 Developed the MisCompare Analysis Tool (MCAT) for the <b>hardware verification</b> of PowerPC FPU pseudo-random instruction streams using C and Shell. Was offered a <b>Pre-Placement Offer</b> to join IBM after graduation.  <b>Omega Electronics</b> , Jaipur, India – <i>Trainee</i> 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 <b>Sales division</b> .  <b>TATA Power</b> , Mumbai, India – <i>Trainee</i> 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.