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Gerard van Harten was born on November 11, 1984, in Katwijk, the Netherlands. He spent most of his childhood in Amersfoort, where he graduated from high school in 2002, with a focus on natural and life sciences. His passion for experimental (astro)physics led to an MSc degree in Astrophysics from Utrecht University in 2010. For the MSc thesis in the Experimental Astrophysics group of professor Christoph Keller, he developed and characterized the first breadboard model of the SPEX spectropolarimeter, and performed clear-sky measurements including forward aerosol modeling.

Gerard continued his work on SPEX as a PhD candidate, which resulted in this thesis, describing the instrument development, polarimetric error analysis and calibration, ground-based aerosol characterization, and absorption band polarimetry. Results of his work were presented in refereed journals and at various international conferences and institute visits.

Gerard executed several projects parallel to his thesis work, including the development of polychromatic polarization modulators for the 300–2500 nm X-shooter spectrograph on the Very Large Telescope and for the ExPo imaging polarimeter on the William Herschel Telescope. Furthermore, he was involved in hardware and software development for iSPEX, the network of smartphone spectropolarimeters that successfully mapped aerosol optical thickness throughout the Netherlands through citizen science.

Gerard will continue to work on high-accuracy polarimetry for remote aerosol characterization, starting in 2014 with preparations for an airborne SPEX instrument at SRON Netherlands Institute for Space Research, followed in 2015 by in-flight characterization of the AirMSPI and AirMSPI-2 airborne imaging polarimeters, and in-flight intercomparisons with other polarimeters, including SPEX, at the NASA Jet Propulsion Laboratory in California.
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