

**CURRICULUM VITAE 19.5.2021****PERSONAL INFORMATION**

Antti Ilmari Penttilä, male, born 28.2.1977 in Espoo, Finland  
 Finnish national, three children (born in 2004, 2008, 2017)  
 Current residence Espoo, Finland

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**EDUCATION AND DEGREES**

Title of Docent (Planetary Sciences), University of Helsinki, 2018  
 Doctor of Philosophy, University of Helsinki, 2011  
 in astronomy, grade Eximia Cum Laude Approbatur (5/6)  
 title of thesis "Light scattering in random media with wavelength-scale structures: astronomical and industrial applications"  
 Licentiate of Social Sciences, University of Helsinki, 2009  
 in statistics, grade Eximia Cum Laude Approbatur (5/6)  
 title of licentiate thesis "Statistical analysis of the polarization of asteroids and comets"  
 Master of Social Sciences, University of Helsinki, 2002  
 master's thesis grade Eximia Cum Laude Approbatur (5/6)  
 title of master's thesis "Partikkelien muodon mallintaminen niiden 2D-satunnaisprojektioista" (in Finnish)

**CURRENT POSITION**

University researcher, permanent position, 2020–, Department of Physics, University of Helsinki

**PREVIOUS PROFESSIONAL APPOINTMENTS**

University researcher, fixed term, 2015–2020, Department of Physics, University of Helsinki  
 Post-doctoral researcher, 2012–2015, Department of Physics, University of Helsinki  
 Doctoral student, 2003–2011, Observatory and Department of Physics, University of Helsinki  
 Course lecturer, 2008, 2010, 2012–2014, Observatory and Department of Physics, University of Helsinki  
 Deputy University Lecturer, January 2002, Department of Forest Sciences, University of Helsinki  
 Course lecturer, 2001, Palmenia, University of Helsinki

**MAJOR RESEARCH FUNDING AND ACADEMIC LEADERSHIP**

Co-Investigator, Comet Interceptor science team, 2020–, European Space Agency  
 Member, Gaia Data Processing and Analysis Consortium DPAC, 2019–, European Space Agency  
 Science investigator, HERA APEX Cubesat Phase A study, 2018–2020, European Space Agency  
 Science expert, Phase A COPINS study for the AIM mission, 2015–2016, European Space Agency  
 Technical Lead, Gaia Added Value Interface for Spectral Classification, 2015–2017, European Space Agency  
 Science team member, MIXS instrument on board BebiColombo spacecraft, 2015–, European Space Agency

Participation in successful application for Academy of Finland consortium project (prof. Karri Muinonen), 2016–2020, 1 360 k€

Participation in successful application for European Research Council Advanced Grant (prof. Karri Muinonen), 2013–2018, 2 750 k€

Participation in successful applications for SHOK Forestcluster Ltd. consortium projects Efficient networking towards novel products and processes (EffNet, 2010-2013, TEKES, 100 k€, prof. emer. Kari Lumme) and Älykkäät ja resursseja säästävät tuotantoteknologiat (ReP, 2008-2010, TEKES, 140 k€, prof. emer. Kari Lumme)

Participation in successful application for consortium project Characterization and control of pigment coating structures (C-Coat, 2003-2005, TEKES, 160 k€, prof. emer. Kari Lumme)

Project manager (EffNet), 2010–2012, Department of Physics, University of Helsinki

Project manager (ReP), 2008–2010, Observatory, University of Helsinki

Project secretary (C-Coat), 2006–2007, Observatory, University of Helsinki

Co-supervisor, PhD in astronomy, Anne Virkki (2015), Olli Wilkman (2016), Timo Väisänen (2020), Julia Martikainen (2021)

Co-supervisor, Master in astronomy, Hanna Pentikäinen (2013), Julia Martikainen (2015), Timo Väisänen (2016), Hilppa Hietala (2020)

Supervisor, Bachelor in astronomy, Mikko Vuori (expected 2021), Elizaveta Uvarova (2021), co-supervisor, Timo Väisänen (2015)

**AWARDS**

2014, International Astronomical Union assigned asteroid name (15224) Penttilä

2012 Elsevier/JQSRT Peter C. Waterman Award, presented in the category of Scattering and Remote Sensing to outstanding early-career scientists

Master's thesis reward by the Faculty of Social Sciences, 2002

**OTHER SCIENTIFIC OR ACADEMIC MERITS AND ACTIVITIES**

ESF Europlanet 2020 RI – TA call panel member, 2017 panel member

Member, International Astronomical Union, 2015–

Guest editor in Planetary and Space Science, volume 118, 2015; Journal of Quantitative Spectroscopy and Radiative Transfer, volume 112, 2011

Chairman of Local Organizing Committee of International Conference on Asteroids, Comets, Meteors, Helsinki, Finland, 2014; International Conference on Electromagnetic and Light Scattering XII, Helsinki, Finland, 2010

Editor of Proceedings of International Conference on Asteroids, Comets, Meteors, Helsinki, Finland, 2014; International Conference on Electromagnetic and Light Scattering XII, Helsinki, Finland, 2010

Young scientist, International Space Science Institute, Bern, Switzerland, team Light Scattering Phenomena in Small Body Surfaces, 2007–2008

Referee in Astronomy & Astrophysics, Astronomy and Computing, Astrophysical Journal Supplement Series, Brazilian Journal of Chemical Engineering, Icarus, Journal of Laser Applications, Journal of the Optical Society of America A, Journal of Quantitative Spectroscopy and Radiative Transfer, Monthly Notices of the Royal Astronomical Society, Nordic Pulp & Paper Research, Planetary and Space Science, Remote Sensing, Research in Astronomy and Astrophysics, Science

Observing time at the Nordic Optical Telescope: semester 2019A IAC-Nordic (Co-I), period 55 (Co-I), period 53 (Co-I), 2015 Fast track (PI), period 47 (PI)

**SCIENTIFIC IMPACT OF RESEARCH**

h-index 17 (ISI Web of Science)

63 authored or co-authored articles in refereed international scientific journals