

Curriculum Vitae, Markku Poutanen**16.6.2016****1. Full name**

- Poutanen, Markku Juhani
- male

2. Date and place of birth, nationality, current residence

- 20.11.1955, Parikkala, Finland
- citizenship: Finnish
- current residence: Helsinki, Finland

3. Education and degrees awarded

- Doctor of Philosophy (geophysics/geodesy), University of Helsinki, 2000
- Licentiate of Philosophy (astronomy), University of Helsinki, 1988
- Master of Science (astronomy), University of Helsinki, 1981
- Associate professor (Docent) in Space Geodesy, Aalto University 2005-
- Associate professor (Docent) in Geodesy, University of Helsinki, 2002-

4. Current position

- Professor, Director of the Department of Geodesy and Geodynamics, Finnish Geospatial Research Institute (former Finnish Geodetic Institute) 05/2001 -

7. Academic carrier

- Academy of Finland Research Fellow Post (varttuneen tieteenharjoittajan apuraha) 2007-2008
- Research Scientist at the Finnish Geodetic Institute 1985-2001
- Research assistant, assistant lecturer, lecturer at the Astronomical Observatory, Univ.Helsinki 1978–1989
- Visiting research assistant at the Lowell Observatory, Arizona, U.S.A., 1981
- Research assistant of the Academy of Finland (Univ. of Helsinki) 1984–1985, 1987, 1988, 1989

8. Research funding as well as leadership and supervision

- The Finnish Association of Non-fiction Writers (Suomen tietokirjailijat) six-month grant for writing a book on GNSS, 2015, 13000 €
- EU EMRP (European Metrology Research Programme) JRP Metrology for long distance surveying; 2013-15, 117000€
- EU EMRP (European Metrology Research Programme) JRP Absolute long distance measurement in air, 2008-11, 32000€
- Ministry of Agriculture and Forestry; renewal of Metsähovi geodetic station and FinnRef network, 2012-2016, 8.1 M€
- Academy of Finland, consortium, leader, From ultrarapid data transfer into science – near realtime VLBI application, 2010-13, 496000€
- Academy of Finland, Regional Crustal Deformation and Lithosphere Thickness, 2008-2010, 196000 €
- Academy of Finland, Precise geoid modelling, 2007-2010, 114000 €
- Academy of Finland, senior research fellowship, Upper Mantle Dynamics and Contemporary Crustal Motion in Fennoscandia, 2007-08, 107000 €
- Academy of Finland, mobility, 2007, 4000 €
- Academy of Finland, mobility, 2006, 13000 €
- Academy of Finland, mobility, 2005-6, 3900 €
- TEKES, Consortium with FMI, Geophysically supported satellite positioning, 2004-07, 730000 €

Leadership in research work

- Chairman of the International Lithosphere Program (ILP) Regional coordination committee CC 1/5 “Upper Mantle Dynamics and Quaternary Climate in Cratonic Areas, DynaQlim” (2007-2011)
- Chairman of the ECGN (European Combined Geodetic Network) project (2008-2012)
- Chairman of the Nordic Geodetic Commission project “NCGN – NKG Combined Geodetic Network. Understanding the Sea Level Variation in the Fennoscandian area” (2008-2013)

9. Merits in teaching and pedagogical competence (selected)

Teaching experience (active)

- Satellite positioning (Aalto University (former Helsinki Univ. of Technology), Department of Surveying; 2006 –)
- Satellite positioning (University of Helsinki, bi-annually 2008 –)
- Space geodesy (Aalto University; bi-annually 1996 –, supervising exercises 1989 –)
- Space geodesy (bi-annually, University of Helsinki, 2003 –)
- Geodesy (bi-annually, lectures with other lecturers, University of Helsinki, 2011–)

PhD thesis supervision

- Instructor of Doctoral thesis of Ulla Kallio (current)
- Instructor of Doctoral thesis of Hannu Koivula (current)
- Instructor of Doctoral thesis of Hannu Ruotsalainen (current)
- Instructor of Doctoral thesis of Timo Saari (current)
- Instructor of Doctoral thesis of Jorma Jokela (2014): Length in Geodesy – On Metrological Traceability of a Geospatial Measurand. Aalto University, School of Engineering.
- Instructor of Doctoral thesis of Minttu Uunila (2012): Improving geodetic VLBI: UT1 accuracy, latency of results, and data quality monitoring. Aalto University, School of Electrical Engineering, Metsähovi Radio Observatory
- Instructor of Doctoral thesis of Maaria Nordman (2010): Improving GPS time series for geodynamic studies. University of Helsinki, Department of Physics.
- Instructor of Doctoral thesis of Andres Rüdja (2003): Geodetic Datums, Reference Systems and Geodetic Networks in Estonia. University of Helsinki, Department of Geophysics
- Examiner of the Doctoral thesis of Reima Eresmaa (2007)
- Opponent of PhD thesis of Tarmo Kall (2016), Vertical Crustal Movements Based on Precise Levellings in Estonia. Tartu University of Life Science, Estonia.
- Opponent of PhD thesis of Jari Pohjola (2014), Probabilistic Modeling of Landscape Development and Surface Water Body Formation. Tampere University of Technology
- Opponent of PhD thesis of Aive Liibusk (2013), Precise Hydrodynamic Levelling using Pressure Gauges with Application to Improvement of the Estonian National Levelling Network. Tartu University of Life Science, Estonia.
- Opponent of Licentiate thesis of Martin Lidberg (2004), BIFROST data reprocessing; Chalmers, Sweden.

10. Prizes and scientific honours

- Knight of the White Rose of Finland (Suomen Valkoisen Ruusun Ritarimerkki) (2012)
- Correspondent member of the German Geodetic Commission (Korrespondierende Mitglieder, Deutsche Geodätische Kommission, 2010)
- Full member of Finnish Academy of Science and Letters (Suomalainen Tiedeakatemia, 2009)
- Golden Badge of Merit of the National Land Survey of Finland (Maanmittauslaitoksen kultainen ansiomerkki) (2009)
- Fellow of the International Association of Geodesy, IAG (2007)
- Asteroid 3760 *Poutanen* (discovered by E. Bowell Jan. 8, 1984) is named in honour of M. Poutanen.

11. Other academic merits

11.1. Scientific expert positions in international organisations (Current):

- President of EUREF (IAG Reference Frame Sub-Commission 1.3a for Europe) (2015-2019)
- Member of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) working group of Global geodetic reference frame in future (GGRF)
- Chairman of the United Nations Committee of Experts on Global Geospatial Information Management in Europe (UN-GGIM: Europe) working group of Geodetic reference frame in Europe (GRF: Europe)
- Member of the Presidium of the Nordic Geodetic Commission (2006-)
- Member of SCAR/SERCE (Solid Earth Response and influence on Cryosphere Evolution) Steering committee (2012)
- Associate member of the International Association of Geodesy (IAG) service IGS (International GNSS Service)

11.2. Scientific expert positions in national committees and national delegates (Current):

- Member of the National Committee on Arctic and Antarctic Research (2016-)
- Member of the national steering committee of the Antarctic Research (2007-)

- Member of the National Committee of International Union of Geodesy and Geophysics (IUGG) (2003-)
- Member of the National Committee of the International Lithosphere Programme (ILP) (2004-)
- Member of the National Committee on Space Research (COSPAR) (2006-)
- Member of the National Group of Integrated Ocean Drilling Program and International Continental Drilling Program (IODP/ICDP) (representative of the Finnish Academy of Science and Letters) (2011-)
- National representative to the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) working group of Global geodetic reference frame in future (GGRF)
- Member of the GIAC (GGOS Interagency Committee) Planning group (2011-)
- National Delegate to the Scientific Committee on Antarctic Research (SCAR) (2004-)
- National Delegate to the International Association of Geodesy (IAG) (2003-)

11.3. Past scientific expert positions national and international involvement (selected):

- [Chairman of the National Committee on Arctic and Antarctic Research \(2006-2015\)](#)
- Chairman of the sub-commission 3.2 of the International Association of Geodesy (IAG) Crustal deformations (2003-2015)
- President of the Geodesy Division of the European Geosciences Union (EGU) (2009-2013)
- Co-chair of the Expert Group GIANT (Geodetic Infrastructure on Antarctica) of the Scientific Committee on Antarctic Research (SCAR) (2008-2012)
- Chairman of a working group to prepare a Recommendation of Public Administration (JHS) on measurements in EUREF-FIN reference frame (2011-2012)
- Convener of the European Geophysical Union 2012 General assembly session G3.1/CR1.80/GD3.11 Glacial Isostatic Adjustment, Mantle Viscosity and Ice Sheet Fluctuations
- Chairman of the scientific organizing committee of NKG autumn school 09/2012 Lammi, Finland
- Chairman of the Task Force “Nordic Geodetic Observing System (NGOS)” by the Presidium of the Nordic Geodetic Commission (NKG) (2003-2010)
- Member of the Steering Committee of the International Association of Geodesy (IAG) Commission 3 on Geodynamics and Earth Rotation (2003-2011)
- Member of the ICP1.2 (Inter-Commission Project 1.2: Vertical Reference Frames; IAG and COSPAR)
- Member of the Steering Committee of the International Association of Geodesy (IAG) project Global Geodetic Observing System (GGOS) (2006-2011)
- Member of the Steering Committee of the International Association of Geodesy (IAG) Communication and Outreach Branch (2003-2010)
- Member of the National Committee of the Oceanic Research (SCOR) (2002-2009)
- Chairman of the Finnish Geophysical Society (2006), vice-chairman (2005), member of the board (2004,2007)
- Member of the Board of the Federation of Finnish Learned Societies (Tieteellisten seuran valtuuskunta) (2003-2006)
- President of the URSA astronomical association (2003-2005)
- Chairman of the National Committee for the new height system in Finland (2004)

12. Societal impact of research

- **Radio- and television programs.** Author of the monthly “Starry night” (Kuukauden tähtitaivas) review in the Finnish Radio (since 1981).
- Popular articles in newspapers, Ursa Tähdet ja Avaruus and Ursa books.
- Author of two university-level textbooks

13. Positions of trust in society and other societal merits

- Chairman of the Finnish Publication Forum Project panel 5, Geosciences and Environmental Sciences (2011-2013)
- Member of the Advisory Committee on Metrology (2010-)
- Member of the Advisory Committee on Metrology sub-committee, Scientific Metrology (2007-)
- Member of the Advisory Board of the Sodankylä Observatory, University of Oulu (2010-2013)
- Member of the national steering committee of the Antarctic Research (2007-)
- Member of the Executive Editorial Board of the Nordic Journal of Surveying and Real Estate Research (2004-)