



## CURRICULUM VITAE

Updated 1 August 2018

**Personal information** Paula Anna-Maria Eerola  
Born January 10, 1962 in Joensuu, Finland.  
Work address P.O.Box 3, FI-00014 University of Helsinki, Finland. Tel: +358 2941 22237  
(executive assistant Tiina Hartikainen)  
Email vicepresident [at] helsinki.fi Twitter @PaEerola  
<https://www.helsinki.fi/en/university>  
Finnish and Swedish citizen

### Education and degrees awarded

1994 Docent of experimental particle physics in University of Helsinki, Finland  
1990 Doctor of Philosophy (PhD) in experimental particle physics, University of Helsinki, Finland  
1985 Master of Science in physics, University of Helsinki, Finland  
1980 Matriculation examination, Joensuun keskustan lukio, Joensuu, Finland

### Language skills

Mother tongue: Finnish.

Other languages: Fluent in Swedish and English (oral, written). A fair knowledge of French and German.

### Current position

Vice-Rector, University of Helsinki, from 2018

Professor of Experimental Elementary Particle Physics, University of Helsinki, from 2008.

### Previous professional appointments

2018 Dean, Faculty of Science, University of Helsinki  
2016-2017 Director of Helsinki Institute of Physics, Finland  
2001-2008 Professor of Particle Physics (permanent), Lund University, Sweden  
1998-2004 Special Researcher (Swedish Research Council), Lund University, Sweden  
1997 Associate professor locum, Physics Department, University of Helsinki, Finland  
1996-2001 Assistant professor in experimental particle physics, Physics Department, University of Helsinki, Finland. On leave of absence 1996 - 1997, 1998 - 2001.  
1993-1997 CERN Staff Research Physicist, Particle Physics Experiments Division, CERN, Switzerland  
1994-1998 Research Assistant in the Research Institute for High Energy Physics, University of Helsinki, Finland. On leave of absence 1994 - 1998.

1991-1993	CERN Research Fellow, Particle Physics Experiments Division, CERN, Switzerland
1991	Junior Research Associate locum, Academy of Finland, Finland
1988-1992	Research Assistant in the Research Institute for High Energy Physics, University of Helsinki, Finland. On leave of absence 1988 - 1990, 1991- 1992.
1987-1990	Research Assistant, Academy of Finland, Finland
1984-1986	Research Assistant locum in the Research Institute for High Energy Physics, University of Helsinki, Finland

## Research leadership and coordination

### *Research leadership, funding and policies:*

- Member of the "Vision for higher education and research 2030" (Korkeakoulutuksen ja tutkimuksen visio 2030) action plan group "Research, Development and Innovation", 2018. Working group set up by the Finnish Ministry of Education and Culture.
- Member of the Steering group of the Development Programme of Data Management and Computing (Datanhallinnan ja laskennan kehittämissohjelman ohjausryhmä) 2017- . Working group set up by the Finnish Ministry of Education and Culture.
- Delegate of Finland in the NORDSYNC Steering Committee/ESRF Council 2018-2019.
- Delegate of Finland at the CERN Council 2016-2019.
- Delegate of Finland at the FAIR Council since 2016.
- Chair, Research Council for Natural Sciences and Engineering, Academy of Finland 2013-2017.
- Chair, Research Infrastructure Sub-Committee (Tutkimusinfrastruktuurijaosto), Academy of Finland 2013-2014; Member, Research Infrastructure Committee (Tutkimusinfrastruktuuriakomitea), Academy of Finland, 2014-2017.
- Member of the Board, Academy of Finland 2013-2014.
- Chair, Physics and Astronomy Panel, Publication Forum, Federation of Finnish Learned Societies 2010-2017.
- Member of the Cooperation Forum for Scientific Computing (Tieteellisen laskennan yhteistyöfoorumi) 2013-2015, vice-chair 2016-2018.
- Member of the NordForsk High Level Group for Research Infrastructure 2013-2017.
- Member of NOS-N, representing the Research Council for Natural Sciences and Engineering, Academy of Finland, 2013-2017.
- Member of the Tenure Track Steering Group, University of Helsinki, 2010-2012.
- Member of the Faculty Board, Science Faculty, University of Helsinki, 2010-2013, 2014-2017.
- Representative of Finland in Restricted ECFA - European Committee for Future Accelerators 1997-1998 and 2012-2017.
- Division Head, Experimental High Energy Physics, Lund University, Sweden, 2005-2008.
- Member of the Board of the Physics Institution of Lund University 2005-2008.
- Member of the Staff Appointments Committee, Science Faculty, Lund University, 2006-2008.
- Member of the Equal Opportunities Committee, Science Faculty, Lund University, 2004-2008.
- Member of the Board of Directors of SNIC, Swedish National Infrastructure for Computing 2002-2012.

### *Coordination responsibilities related to own research field:*

- Member of the Particle Data Group since 2014.
- Member, CMS B physics publication committee 2012-2015, B/top physics publication committee 2016-.
- Member of the CMS Management Board 2012-2016.
- Programme director of the CMS Programme of Helsinki Institute of Physics (HIP) 2010-2015.
- Project leader of the HIP CMS Tracker project 2009, HIP CMS Experiment Project 2010.
- Member of the CMS Chair Advisory Group 2011-2012.
- Convener, CMS B Physics Analysis Group, and member of the CMS Physics Coordination 2009-2010.
- Member of the CMS Tracker Institute Board and Tracker Upgrade Management Board 2010-2016.
- Main coordinator of a NordForsk Joint Nordic Infrastructure Project 'LHC and Beyond' 2008-2012.

- Main coordinator of a NorFA-NordForsk Research and Training Network ‘Discovery Physics at LHC’ 2001-2007.
- Nordic Member of the Project Overview Board of the LHC Computing Grid project 2003-2012.
- Nordic Member of the LHC Computing Grid Memorandum-of-Understanding taskforce 2004-2005.
- Member of the NorduGRID Steering Group 2000-2008, 2010-2015.
- Member of the SWEGRID committee of the Swedish Natural Science Research Council 2000-2002.
- Member of the CERN-committee of the Swedish Natural Science Research Council 1999-2005.
- Member of the Board of the Swedish LHC-consortium 1998-2008.
- Member of the ATLAS TRT Steering Committee 1998-2005, and TRT Institute Board 2006-2008.
- Convener of the B-physics working group of ATLAS 1993-2005.

#### *Research evaluation:*

- UK Research Excellence Framework REF2021, International Member of the Main Panel B: Physical sciences, engineering and mathematics, 2018-2021.
- Evaluation of Chalmers University of Technology, Sweden, 2018.
- Evaluation of NIKHEF, the Dutch National Institute for Subatomic Physics, the Netherlands, 2017.
- Scientific Advisory Board of Aalto University School of Science, 2016-2017.
- Millennium Technology Prize, member of the preselection steering group, 2017.
- Member of the selection board for CERN limited duration physics research staff, 2013-2017.
- Evaluation of applications for the Knut and Alice Wallenberg foundation, 2013, 2015-2018.
- Member of the MAT-PHY Panel, H2020, EC, Innovative training networks 2016.
- Member of the Physics Panel, EC Consultation on Integrating Activities for H2020, EC, 2013.
- Member of the Physics Panel, Capacities Programme, FP7, EC. Research Infrastructures 2008.
- Member of the Physics Panel, People Programme, FP7, EC. Marie Curie fellows 2007-2011. Also acting as a vice-chair. Initial training networks 2011, Innovative training networks 2014.
- Member of the Physics Panel, Human Potential Programme, FP6, EC. Research and Training Networks in 2003, Marie Curie fellows 2004-2006.
- Member of the Physics Panel, Human Potential Programme, FP5, EC. Research Networks in 1999.
- Member of the KFI/RFI (Research Infrastructure Committee) Evaluation group 1 of the Swedish Science Research Council 2005-2012.
- Member of the Evaluation group NT-M of the Swedish Science Research Council. Evaluation of applications to VR in 2001-2004.
- Member of the Evaluation group 1 under the Physics Committee of the Swedish Natural Science Research Council. Evaluation of applications to NFR and FRN in 1999-2000.

#### **Academic and professional activities**

##### *Experiments:*

- Member of the CMS experiment since 2008. Research: All aspects of B physics at LHC-CMS. Physics beyond the Standard Model at LHC-CMS. Application of Grid-technologies to LHC data processing. CMS Tracker. CMS upgrade.
- Member of the ATLAS experiment 1992-2008. Research: All aspects of B physics at LHC-ATLAS, and new physics searches – feasibility studies and detector performance optimization. Design and construction of the ATLAS Transition Radiation Tracker. B-physics triggers, track trigger using the ATLAS Transition Radiation Tracker.
- Member of the DELPHI experiment, as a PhD student and post-doc 1985-1994. Research: Soft gluon structure in hadronic final states. Heavy flavours in Z0 Decays. Neural Networks. Search for non-minimal Higgs bosons. DELPHI microvertex detector: Mechanics of the detector upgrade. Muon trigger and event tagging in the DELPHI Hadron Calorimeter.
- UA1 experiment, diploma work 1984-1985. Analysis of UA1 data: Measurement of the strong coupling constant from jet rates.
- UA2 experiment, summer student 1984. Development of an on-line filter for top-quark searches.

*Other research projects:*

- Application of particle physics detectors to radiation detection.
- Computing and data management for particle physics experiments: NorduGrid-ARC, KnowARC, and other projects.
- Linear colliders (1991-1992): Simulation of charged Higgs boson production.

*Publications:*

- Over 700 peer-reviewed publications. See <http://www.helsinki.fi/~paeerola/PE.html>

*Student supervision:*

- Main supervisor of 7 PhD theses, currently supervising 3 PhD students.
- Main supervisor of 11 MSc theses.

*Teaching experience:*

- Director of Doctoral School in Natural Sciences, University of Helsinki, 2014-2015.
- Director of studies (Oppiainevastaava) for physics, Dept. of Physics, University of Helsinki 2010-2013.
- Courses at University of Helsinki since 1997. Helsinki University of Technology 1991.

*Outreach:*

- Popular lectures: e.g. Studia Generalia, Helsinki Insight seminars (University of Helsinki), Lund Philosophy Circle, lectures to physics teachers, etc.
- TV-, radio- and newspaper interviews.
- Coordination of particle physics outreach activities at the Helsinki Institute of Physics and University of Helsinki.

**Membership in scientific societies**

- Member of the Finnish Academy of Engineering Sciences since 2016.
- Member of the Finnish Academy of Science and Letters since 2012.
- Member of the Finnish Society of Sciences and Letters since 2010.
- Member of the Royal Swedish Academy of Sciences since 2010.
- Member of the Board, High Energy Particle Physics division of the European Physical Society 2008-2015.
- Member of Kungliga Fysiografiska Sällskapet since 2007.
- Vice-chair of the Swedish Physical Society 2007-2009, member of the Board 2004-2009.
- Member of the Swedish National Committee for Pure and Applied Physics, The Royal Swedish Academy of Sciences, 2004-2009.

**Prizes, acknowledgements**

- Knight, First Class, of the Order of the White Rose of Finland, 2017.
- Honorary doctor in technology, Lappeenranta University of Technology, Finland 2017.
- E.J. Nyström prize awarded by the Finnish Society of Sciences and Letters 2016.