

Mark Pearce

Date and place of birth & citizenship

- 29th March 1970, Great Britain.
- Swedish and British citizenship.

Contact details

- KTH, School of Engineering Sciences, Department of Physics.
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Career history

- 2020-, Deputy Dean (*vice skolchef och Fakultetsförnyelseansvarig*), Faculty of Engineering Sciences, KTH.
- 2012-2019, Head of Physics Department (*prefekt*), KTH.
- 2008-2011, Director of undergraduate education (*studierektor*), Department of Physics, KTH.
- 2007, Professor of physics (with specialisation in astroparticle physics), KTH.
- 2003, Associate professor (*lektor*), KTH. Swedish Research Council *Lektorsanställningsbidrag*.
- 2000, *Docent* in Physics at KTH
- 1998, Assistant professor (*forskarassistent*), KTH.
- 1996, Postdoc, Department of Physics, KTH. Wenner-Gren Centre Scholarship.
- 1996, Ph.D. in Experimental Particle Physics, The University of Birmingham, Great Britain.
- 1992, B.Sc. (honours). Applied physics. Brunel University, Great Britain.

Awards and recognition

- 2020, elected to Royal Swedish Academy of Sciences (Kungl. Vetenskapsakademien, KVA), Physics Class.
- 2012, elected as Fellow, Institute of Physics, IOP.
- 2010, Wallmarkska Prize, KVA.
- 2003, Göran Gustafsson small Prize for young researchers.

Supervision

- Ph.D. students: 10 (completed); 1 (active).
- Postdocs: 9 (completed); 1 (active).

Research activity and leadership

- 1999-, *astroparticle physics / high-energy astrophysics:*

2018-, X-Calibur/XL-Calibur - X-ray polarimetry of compact objects with focusing X-ray optics. Swedish lead. Collaboration between USA/Japan/Sweden.

2017-, P.I. for CubeSat X-ray monitor. KTH student satellite.

2005-, PoGOLite & PoGO+ - X-ray polarimetry of Crab & Cygnus X-1. Swedish lead, 2005-. Mission P.I., 2009-. Collaboration between Sweden, Japan and USA.

2003-2006, Fermi - gamma-ray space telescope, CsI(Tl) scintillator radiation hardness studies. 1999-, PAMELA - satellite for studies of cosmic-ray antiparticles. Swedish lead and P.I. for anticoincidence system. Collaboration between Italy, Russia, Sweden and Germany.

Recent activity with mission proposals:

2017-, Co-I for ESA M5/F1/M7 mission proposal, e-ASTROGAM (gamma-ray space telescope).

2016-2018, P.I. for small satellite mission, SPHiNX (GRB polarimeter). Phase A completed.

2015-2018, Co-I for ESA M4 mission candidate, XIPE (X-ray Imaging Polarisation Explorer).

Working group leader for particle background studies. Phase A completed.

- 1992-1999, experimental particle physics at CERN:

1996-1999, Radiation tolerant optoelectronics for LHC experiments. Leader of two working groups at CERN. Simulation studies of supersymmetry phenomena. (ATLAS Collaboration).

1993-1995, Silicon-tungsten luminosity monitors and precision electroweak measurements at electron-positron colliders (OPAL Collaboration).

1992-1996, Studies of bottom-quark hadrons using electron-positron collisions, gaseous muon detector systems. (OPAL Collaboration).

Selected appointments

- Chair, Faculty recruitment committee (*rekryteringskommitté*) & Chair, Docent committee (*docentkommitté*), School of Engineering Sciences, KTH, 2020-.
- Member, international advisory board, HEMERA (EU research infrastructure), 2019-.
- Member, National Committee for Astronomy, Swedish Royal Academy of Sciences, 2013-2018.
- Member, reference group, KTH Space Centre, 2013-.
- Member, grant evaluation panel, Göran Gustafsson Foundation (KTH/UU), 2013-. Reserve member of board, 2017-.
- Member, board (*insynsrådet*), Institute for Space Physics (*Institutet for Rymdfysik*), 2012-.
- Swedish delegate to EU COST action MP1104 on polarisation, 2011-2015.
- Member of Manne Siegbahn Memorial Lecture committee, 2011-.
- Member of steering committee of The Oskar Klein Centre, 2008-2014. Founding member.
- Chair, Swedish Space Researchers Committee (SRS), 2008-2011. Chair, National COSPAR committee (*ICSU-kommittén för rymdforskning*), 2008-2011.

Educational activities

- Developer and lecturer for a number of undergraduate- and postgraduate-level courses
- Developer of undergraduate teaching laboratories
- Supervisor to >25 M.Sc. and B.Sc. thesis students
- 2008-2011, Director of undergraduate education (*studierektor*), Department of Physics, KTH.
- 2006-2008, Responsible for Modern Physics M.Sc. programme (120 ECTS), KTH

Publications

[Google Scholar](#)