

# Recipients of the Väisälä Prize 2008

**Professor Eero Hyry**  
at the University of Tampere

Eero Hyry, professor of mathematics at the University of Tampere, was born in Tampere on 25th March, 1960, and obtained his doctorate from the University of Helsinki in 1990. He has worked as a researcher with the National Defence College and the Academy of Finland and has visited numerous universities abroad, including the Universität zu Köln and the Martin-Luther-Universität Halle-Wittenberg in Germany, the Universidad Autónoma de Madrid in Spain and the University of Michigan and University of California at Berkeley in the USA. He was appointed professor of mathematics at the University of Tampere in 2007.

Eero Hyry's principal area of research, algebra, is central to the discipline of mathematics, and his work has been very much in the nature of basic research. He has specialized in algebraic geometry, the structure of the singularities of polynomial equations and the algebra associated with this. Algebraic geometry is one of the crucial areas of modern mathematics, with significant applications in data processing science and data communications in recent decades, e.g. for the purposes of three-dimensional modelling and encryption systems for mobile devices.

Olavi Nevanlinna

**Professor Edwin Kukk**  
at the University of Turku

Edwin Kukk is a researcher in the field of experimental physics who is specialized in electron spectroscopy and its applications to atomic, molecular and surface physics. He was born in 1969 and gained a doctorate from the University of Oulu in 1996. He followed this with a period of post-doctoral research at the universities of California and Michigan in the United States, and was appointed docent in physics at the University of Oulu in 2000 and professor of materials science at the University of Turku in 2005.

Electron spectroscopy is based on interactions between light and material, so that measurements of photon scattering and electron energy states can provide detailed information on the electron and atomic structure of the material in question. The light sources used for this purpose can include intensive photon beams produced by synchrotron radiation in a custom-built accelerator laboratory. The method is invaluable for studying phenomena at the atomic level in nanoscience and nanotechnology, for instance.

Professor Kukk's research team is highly active and well networked internationally, and has gained a reputation for demanding forms of instrumentation and innovative equipment construction projects related to electron spectroscopy. He has been involved as an author in over a hundred scientific publications.

Risto Nieminen