



Inverse problems arise in many areas of science and technology including medical imaging, geophysics, nondestructive testing, industrial process monitoring, remote sensing, and pricing financial instruments. Design and analysis of reliable and computationally effective mathematical solution methods for inverse problems is an active area of contemporary applied mathematics.

The summer school on computational methods for inverse problems in imaging is held at **University of Eastern Finland, Kuopio campus**, on **June 11 - 15, 2012**. The school is aimed at international graduate students and postdoctoral researchers in the fields of mathematics, physics or engineering with an interest towards inverse problems. The school is arranged by the Academy of Finland Doctoral Programs in [Inverse Problems](#) and [Computational Sciences \(FICS\)](#) and it is part of the activity of the Finnish Centre of Excellence in Inverse Problems Research.

Minicourses

The program consists of four minicourses by

[Simon R. Arridge](#), Department of Computer Science,
University College London: "Optical tomography"

[Alison Malcolm](#), Department of Earth, Atmospheric and Planetary Sciences,
Massachusetts Institute of Technology: "[Algorithms for including multiple scattering in seismic imaging](#)"

[Carola-Bibiane Schönlieb](#), Department of Applied Mathematics and Theoretical Physics,
University of Cambridge: "Non-smooth regularisation in inverse problems"

[Samuli Siltanen](#), Department of Mathematics and Statistics,
University of Helsinki: "Computational inversion using nonlinear Fourier transform"

Registration

Register before 31th of March 2012 by sending email into ip-summerschool@uef.fi including your name, institution, address and email-address. Participation including lunch and coffee is free of charge.

For more information, see <http://venda.uku.fi/inverse/FrontPage/SummerSchool2012>