

## **MIRAN Tensor Tomography Workshop: Imaging Stress and Strain August 14th 2012**

The study of tensor field tomography has been greatly influenced by the work of Vladimir Sharafutdinov, particularly his book Integral Geometry of Tensor Fields. Applications of tensor and vector tomography include velocimetry, stress measurement using polarized light, strain measurement using x-ray and neutron diffraction, and measurement of the elastic tensor of a solid using transmitted sound waves (including seismic imaging), for example. Prof Sharafutdinov is currently a distinguished MIRAN visitor at Manchester and this one-day workshop will focus on stress and strain measurement. Andrei Errapart is a member of a Tallinn group known especially for photoelastic measurement of strain in glass. Rachel Tomlinson leads an experimental group in Sheffield that has pioneered tomographic stress measurement using polarized light tomography, as well as magnetophotoelasticity.

Speakers to include:

- Vladimir Sharafutdinov (Novosibirsk State University), <http://www.math.nsc.ru/~sharafutdinov/cv.html>,
- Andrei Errapart (Tallinn University of Technology) <http://www.ioc.ee/wiki/doku.php?id=en:strukt:inimesed&pid=13&lang=en>
- Rachel Tomlinson (University of Sheffield) <http://www.shef.ac.uk/mecheng/staff/rtomlinson>
- William Lionheart (University of Manchester) <http://www.maths.manchester.ac.uk/~bl/>

To be held in Frank Adams Room 1, Alan Turing Building, with registration and coffee at 10:30am. Workshop commences at 11am and finishes at 5pm.

Attendance is free of charge, but please email Andrew Smith ([andrew.d.smith@manchester.ac.uk](mailto:andrew.d.smith@manchester.ac.uk)) in advance to confirm a place. Detailed programme to be confirmed.