

## ICTS Seminar

- Title : Weak convergence approaches in homogenisation theory. Old and New.
- Speaker : Harsha Hutridurga, Imperial College London, UK
- Date : Monday, May 22, 2017
- Time : 11:00 AM
- Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore
- Abstract : During this informal session, I would like to give a brief overview of convergence analysis in the theory of homogenisation concerning differential equations with highly oscillatory coefficients.

The first part of this session will discuss some computations in the context of periodic homogenisation via (a) oscillatory test functions method, (b) two-scale convergence approach. Time permitting, we will also quickly go through the notion of H-convergence via the celebrated div-curl lemma.

The second part of this session will discuss some recent developments in the context of “Homogenisation structures” which cover a wide class of structural assumptions on the highly oscillatory coefficients such as of almost-periodic type. I will try to motivate most of the abstract objects in this new theory via some concrete examples.