

Seminar

Line Defect dynamics and solid mechanics

Amit Acharya

Carnegie Mellon University, Pittsburgh

Terminating lines of surfaces of discontinuity serve as a model of common line defects that arise in a host of materials; dislocations and grain/phase boundary junctions in crystalline and soft matter. I will describe a framework for considering line defect dynamics within continuum mechanics. The theory will be illustrated with examples related to dislocation dynamics with inertia, dislocation nucleation, and the computation of fields of interfacial defects like the star disclination and grain boundary disconnections.

Tuesday, Jul 19th 2016

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS