Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Internally driven solids ANANYO MAITRA, SUROPRIYA SAHA, Indian Inst of Science, RAMIN GOLESTANIAN, Rudolf Peierls Center for Theoretical Physics, University of Oxford, 1 Keble Road, Oxford OX1 3NP, United Kingdom, SRIRAM RAMASWAMY, TCIS, TIFR — What is the long-wavelength, long-time dynamics of an elastic solid composed of motile orientable particles? Can different types of interactions between the motile particles lead to different varieties of active solid? What is the dynamics if the motile particles orient along a spontaneously chosen axis? Is it different from a passive solid which is driven externally? What if the inter-particle interactions instead favour aster-like configurations? I will present an answer to these questions and point out the differences and similarities between internally driven and externally driven solids.

Ananyo Maitra
Indian Inst of Science

Date submitted: 14 Nov 2014 Electronic form version 1.4