

Soft Active Materials

Organizers:

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Soft Active Materials comprise both synthetic and natural systems that undergo large deformations in response to non-mechanical stimuli, such as temperature, pH and electromagnetic fields. Typically, such materials display a complex behaviour that arises from their multi-physics and multi scale nature, and a major thrust in research is devoted to their study, mainly driven by technological applications in the fields of biomedicine and soft-robotics. This session aims at gathering researchers from different disciplines sharing the interest in Soft Active Materials. Topics of interest include theoretical and experimental aspects concerning:

- stimuli-responsive gels and ionic polymer-metal composites;
- liquid crystal elastomers;
- electroactive and magnetoactive polymers;
- shape memory polymers;
- biological tissues.

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