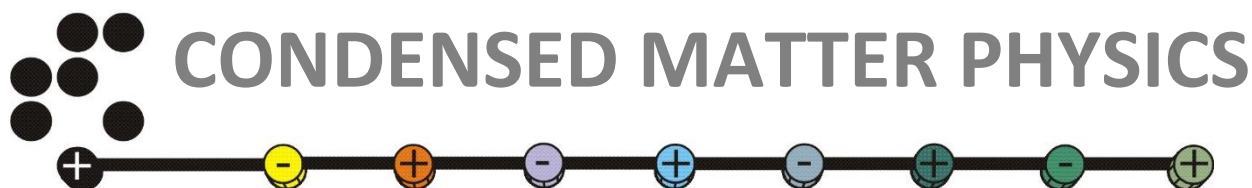


# F-5 SEMINAR



*Wednesday, October 19, 2022  
at 1 PM*

*in the seminar room of physics (room 106)  
Condensed Matter Physics, Jožef Stefan Institute*

***Andraž Rešetič, PhD***  
*Jožef Stefan Institute, Ljubljana*

## ***Thermomechanical and $^2\text{H}$ -NMR studies of polymer-dispersed liquid crystal elastomers***

Liquid crystal elastomers (LCEs) are one of the main representatives of soft shape-morphing materials. Their ability to thermomechanically deform has a great potential to be used in many applications, but any real-life implementation is mostly hindered by their synthesis procedure. In my seminar, I'm going to present you our discovery and study of a new composite material termed 'Polymer-dispersed liquid crystal elastomers' (PDLCEs), made from magnetically ordered LCE microparticles embedded in a conventional silicone matrix. PDLCEs are used to fabricate thermomechanically active soft material in bulk quantities and of arbitrary size and shape. Furthermore, new finds show that the use of proper components can also instil additional shape-programmability to the composite system.

***You are cordially invited to attend.***