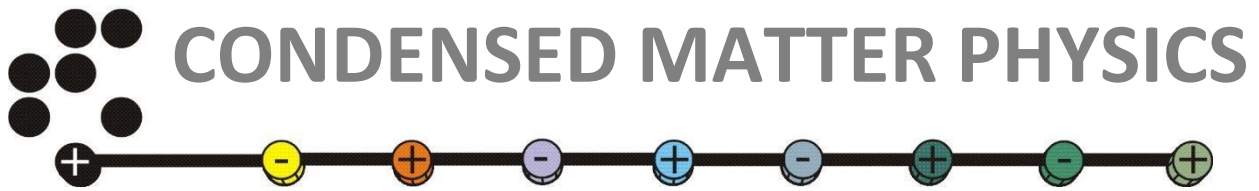


F-5 SEMINAR



***Friday, March 17, 2023
at 10:30 AM***

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

Yoshiko TAKENAKA Ph.D.
*Research Institute for Sustainable Chemistry,
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Self-assembly of liquid crystal and the challenge for the topological change

Recently, micrometer-sized self-assemblies of liquid crystal are abundantly studied. They have unique mechanical and optical properties which are not shown in bulk. In this seminar, at first, I will show you the fabrication of micrometer-sized liquid crystal necklace and its mechanical and optical properties. Liquid crystal necklace is made of nematic droplets of 4-Cyano-4'-pentylbiphenyl (5CB) and tethers between them. The elastic constant of a tether was estimated by the measurement with laser tweezers. Next, I will show the shape-changing self-assembly of liquid crystal complex. This complex changes the shape by the irradiation of ultra-violet light. At last, I will briefly introduce the challenge to change the topology of liquid crystal self-assembly.

You are cordially invited to attend.