

Why do we put liquid crystals into capillaries?

Joonwoo Jeong

UNIST

Nematic liquid crystals are excellent model systems to study the structures and topological defects of partially ordered matter. We push frontiers of this research by investigating confined lyotropic chromonic liquid crystals (LCLS) with giant elastic anisotropy. In this talk, I will introduce a series of experiments that have discovered new director configurations and defects of (chiral) LCLCs in cylindrical confinements. The cylindrical confinement provides two different principal curvatures and surface anchoring condition on demand. I will wrap up this talk by sharing our other works with LCLCs in different geometries.