

Students' Annual Webinar

Effect of concentration fluctuations in active polar fluids

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Active Polar Fluids spanning subcellular scales to oceanic scales such as cytoskeleton, fish schools, show spectacular collective behaviour. We study concentration fluctuations in dense active polar suspensions at Reynolds number of order unity (for example brine shrimp and phytoplanktons) where both viscous and inertial effects are relevant. In particular, I will discuss the stability of an ordered state in these systems and the statistical properties of the complex spatiotemporal patterns that they generate in the disordered state.

Thursday, May 12th 2022

4:00 PM