

## **ICTS Biophysics Seminar**

- Title** : Collective chiral behaviors in single cells and a multicellular system
- Speaker** : Tatsuo Shibata (RIKEN Center for Biosystems Dynamics Research (BDR), Japan)
- Date** : Tuesday, 09<sup>th</sup> July 2024
- Time** : 10:30 AM (IST)
- Abstract** : Most animals have systematic left-right asymmetry in their bodies and organs. Their chiral property should be originated from the organization of the chirality of their constituents. However, the mechanisms of how chiral information is brought from the molecular to the cell, tissue and organ scales are largely unresolved. In my talk, I will present our recent study combining experiment and theory on how the cell-scale chirality emerges from molecular-scale chirality in single cells and how a multicellular chiral behavior arises in a colony of epithelial cells. I will also present a large-scale chiral pattern formation that is self-organized in a population of chiral migrating cells.
- Venue** : Emmy Noether Seminar Room
- Zoom Link: <https://icts-res-in.zoom.us/j/93991375680?pwd=7psfeDmaXM2J9LLUZYb2MxqDLYcSq6.1>  
Meeting ID: 939 9137 5680  
Passcode: 090910