

ICTS Statistical Physics Journal Club Seminar

- Title** : Non-Gaussian Statistics in soft and bio matter
- Speaker** : Ralf Metzler, (University of Potsdam, Germany)
- Date** : Thursday, 17th June 2021
- Time** : 03:00 pm (IST)
- Abstract** : Brownian yet non-Gaussian diffusion, characterised by a linear scaling in time of the mean squared displacement but a non-Gaussian displacement distribution is a phenomenon that has been observed in a variety of systems. In my talk, after a brief historical introduction to Brownian motion and the theory of diffusion, I will review experimental evidence and show how non-Gaussian statistics emerge from random-parameter models, extreme value arguments, and other models. In particular, I will also talk about quenched versus annealed disorder and demonstrate how shape-shifting in tracers leads to time-fluctuating diffusivities. I will finally address anomalous diffusion systems driven by long-ranged correlated Gaussian noise that, in heterogeneous environments, exhibit non-Gaussian displacement distributions.
- Venue** : Please click on the below link to join the seminar
- <https://zoom.us/j/97413161607?pwd=Rk5aUFBNY01FclczSGRJNGFY1JMdz09>
- Meeting ID: 974 1316 1607
- Passcode: 799194