



Indian Institute of Space Science and Technology
Valiamala, Thiruvananthapuram - 695 547, Kerala

Synchronisation-From Classical via Quantum to Technologies

A Colloquium by

Dr. Sai Vinjanampathy

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3:30 PM



16
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IIST
Council Hall

Synchronisation is the adjustment of the rhythm of self-sustained nonlinear oscillators. It was discovered by Huygens and is found everywhere in nature, explaining flocking of birds, blinking of fireflies, the beating of the human heart and also to the stability of electrical networks. In this talk, I will summarise the efforts of scientists to move this topic into the quantum domain and think about synchronising quantum systems. I will introduce quantum information theoretic ideas to measure sync and also show some technology applications.

About the Speaker : Dr. Sai Vinjanampathy obtained his Ph.D. in 2010 from Louisiana State University, USA, followed by Postdoctoral fellowships at the University of Massachusetts, Boston [2010-2012] and the Centre for Quantum Technologies, Singapore [2012-2016]. Since July 2016, Dr. Sai Vinjanampathy has been a faculty member in the Physics Department at IIT Bombay. His group works on the physics of quantum technologies, exploring diverse topics from nonlinear dynamics of quantum systems, quantum computing, exotic phase transitions and novel sensor designs.



Live Stream: <https://tinyurl.com/2p8c4wmx>