

Quantum Synchronization

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Synchronization is a ubiquitous phenomenon observed in a plethora of vastly different classical scenarios and it has been extensively studied in both naturally occurring as well as engineered systems. In recent years, there have seen a growing interest in synchronization phenomena in the quantum regime. In this lecture, we provide an overview of classical and quantum synchronization and a description of some recent studies on the topic

Short Biography

LC Kwek is currently a Principal Investigator at the Center for Quantum Technologies, National University of Singapore. He is also a Co-Director of the Quantum Engineering Program, NRF. At the same time, he is also the current Deputy Secretary General of the International Union of Pure and Applied Physics (IUPAP). Other appointments include: the regional representative of Organization of Chinese Physicists and Astronomers (USA); the Secretary General for the South East Asian Theoretical Physics Association; Council Member for Working Group 5, IUPAP, on Women in Physics; Council Member of Tan Kah Kee Foundation and International Society; the Secretary General, Federation of ASEAN Physics Societies; the President of the Asian Physics Olympiad International Board, Visiting Professor, University of Hainan etc. His main research interest are foundation in quantum mechanics including quantifying multipartite quantum entanglement; quantum cryptography, quantum computation and atomtronics.

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