

Talk on
“Sending information securely: need for quantum key distribution”
Prof. Sibasish Ghosh, IIMSc Chennai
24th April 2017 (12:00 pm)

Prof Sibasish Ghosh has been working in the area of Quantum Information Theory (QIT) - teaching and doing research at IIMSc-Chennai. Apart from QIT, his broad area of interests are Foundations of Quantum Mechanics, and Quantum Optics.

He will be visiting CIC on 24th April 2017 and will be speaking on “Sending information securely: need for quantum key distribution”

Abstract:- Sending secret messages in secured manner is an age-old problem in human society. Assuming the existence of potential adversaries, people developed several methods in order to shield the message from the adversaries (known as 'eavesdropper') but none of these methods guarantees perfect security of transmission of the message unless one takes help of tools provided by Quantum Theory. In this talk, I will briefly describe the current approach -- inside the domain of Classical Physics -- for transmission of information, whose security is based on the assumption of non-existence of any efficient algorithm for factoring a large integer. I will then discuss about generating shared keys (a sequence of 0's and 1's) using the toolbox provided by Quantum Theory, and thereby, discuss briefly about the secrecy of the key.

Date: 24th April 2017

Time: 12:00 pm – 1:00 pm

Venue: Seminar Room, 1st Floor, Cluster Innovation Centre

You are all cordially invited for the talk.