

# BOSE COLLOQUIUM

## (Through Webinar)

**FRIDAY**  
at 4.00 PM

**08**  
**JAN 2021**



**Webinar Link**



**Speaker : Dr. Sudeshna Sinha, FASc, FNA, FTWAS**

JC Bose National Fellow,  
Deputy Director and Professor, Department of Physical Sciences,  
Indian Institute of Science Education and Research Mohali, India

**Title of the Talk : HARNESSING CHAOS**

### Abstract :

We discuss how understanding the nature of chaotic dynamics allows us to control and manipulate these complex systems. A controlled chaotic system can then serve as a versatile pattern generator that can be used for a range of applications.

Specifically we will discuss the application of controlled chaos to the design of novel computational paradigms. Further we indicate how one can exploit the interplay of nonlinearity and noise to obtain more consistent and robust logic operations. We also suggest how these concepts may be applied to systems ranging from electronic circuit to nano-mechanical oscillators.

**YouTube Link**

*Organized as part of Golden Jubilee Celebrations of Department of Science and Technology (DST)*

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