

## TIFR Centre for Interdisciplinary Sciences, Narsingi, Hyderabad 500075

## **Seminar**

Structural basis for telomerase RNA recognition and RNP assembly by the holoenzyme La family protein p65

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**Abstract:** Telomerase is a ribonucleoprotein (RNP) complex essential for maintenance of telomere DNA at linear chromosome ends. The catalytic core of *Tetrahymena* telomerase comprises a ternary complex of telomerase RNA (TER), telomerase reverse transcriptase (TERT), and the essential La family protein p65. Here, I present the first solution NMR and crystal structures of p65 C-terminal domain free and in complex with TER. The structures reveal that RNA recognition is achieved by a novel combination of single- and double-stranded RNA binding, which induces a large conformational change in telomerase RNA essential for catalytic core assembly.

Date: Friday, March 1<sup>st</sup>\_2013

Time: 04:00PM (Tea/Coffee at 03:30PM)

Venue: Conference Hall, TCIS

All are cordially invited