

## TIFR Centre for Interdisciplinary Sciences

21, Brundavan Colony, Narsingi, Hyderabad 500 075

## **Internal Seminar**

## Improved Version of TATAPRO Algorithm Guntupalli Gopi Krishna TCIS, Hyderabad

Sequence-specific resonance assignment is a prelude for the 3D structure determination of proteins using NMR The automated algorithm, spectroscopy. Tracked Assignments **PROteins** (TATAPRO) AuTomated in proposed earlier utilizes the protein primary sequence and peak-lists from a set of triple-resonance spectra, which correlate <sup>1</sup>H<sup>N</sup> and <sup>15</sup>N chemical shifts with those of <sup>13</sup>CA, <sup>13</sup>CB and <sup>13</sup>CO. We have made this algorithm more robust by increasing the number of amino acid residues, which could be identified uniquely. In my presentation, I will demonstrate the utility of a graphical efficient pattern recognition method for in this procedure. assignment will present Ι all the improvisations that we have incorporated into the TATAPRO algorithm.

Thursday, Oct 20<sup>th</sup> 2016

2:00 PM (Tea/Coffee at 1:45 PM)

Seminar Hall, TCIS