TIFR Centre for Interdisciplinary Sciences
21 Brundavan Colony, Narsingi, Hyderabad 500075

Seminar

Long-term Potentiation Requires Unique Postsynaptic SNARE Fusion Machinery

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Activity-dependent modifications in the neuronal synaptic connections which is also known as synaptic plasticity, underlie most of the fundamental adaptive features of the brain; one such example is strengthening of synaptic activity or long-term potentiation (LTP). Trafficking of the AMPA receptors to the post synaptic membrane of the excitatory synapses is critical during NMDA receptor mediated LTP, but the exact molecular machinery is unclear. This seminar will focus on the results that show vesicular membrane fusion is required for regulated AMPA receptor exocytosis during LTP and provide unique features of this particular SNARE-mediated fusion machinery. SNAP-47, a novel Q-SNARE protein in the post-synaptic fusion machinery, has been found to be important in LTP.

Tuesday, Dec 2nd 2014

11:30 AM (Tea/Coffee at 11:15 AM)

Seminar Hall, TCIS