

Seminar

An axonal transport triggered by inositol phosphorylation

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Phosphoinositides act as traffic signals within a cell directing the flow of vesicles between different subcellular compartments. The enzymes that regulate specific phosphorylation of inositol, therefore, are implicated in intracellular trafficking. Typically, the synthesis of a specific phosphoinositol on the vesicular membrane attracts the Rab GTPases, which then recruit the cognate motor to effect the movement. However, the exact mechanism underlying this process is still unclear. We studied how the PI(3)P and P(4,5)P₂ regulate the kinesin-2-dependent movement of vesicles and transmembrane proteins in *Drosophila* axons and cilia. I will discuss some of the recent data and its implications in this seminar.

Wednesday, May 31st 2023

11:30 AM (Tea / Coffee 11.15 AM)

Auditorium, TIFR-H