

# **Students' Annual Seminar**

## **A $\beta$ 42 –Lipid interaction: Condensate formation**

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How A $\beta$  deposits in the extracellular space of Alzheimer's disease(AD) patients' brains has remained elusive. In this context, it is essential to see the effect of lipid and apolipoprotein E (risk factor in AD) on the various pathways of amyloid- $\beta$ 42 (A $\beta$ 42) aggregation. We found that phospholipid (DMPC) leads A $\beta$ 42 to form lipid-peptide condensates. Additionally, we observed that Apolipoprotein E, particularly apoE4, promotes the formation of the lipid- A $\beta$ 42 condensates, possibly by inhibiting the elongation of the regular amyloid fibrils.

***Monday, May 1<sup>st</sup> 2023***

***4:00 PM (Tea / Coffee 3.45 PM)***

***Seminar Hall, TIFR-H***