

# **Seminar**

## **To ROAM or NOT?**

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A unimolecular dissociation process leading to two fragments emerging out of a single reactant possess an attractive yet flat potential in the exit channel, in the 3-8 Å region, resulting in dynamically complex trajectories that do not necessarily follow Arrhenius kinetics of crossing over a barrier, are termed as reactions undergoing “ROAMING” mechanism. The photodissociation of formaldehyde is a celebrated example of reaction with a roaming radical mechanism. In this talk, I will discuss two examples of photo-induced reactions, (i) intermolecular coulombic decay in molecular clusters and (ii) photodissociation of nitrobenzenes, probed using velocity map imaging technique, wherein the roaming mechanism is expected to play vital role in the reaction dynamics.

***Friday, Nov 18<sup>th</sup> 2022***

***4:00 PM (Tea/Coffee at 3:45 PM)***

***Auditorium, TIFR-H***