

## Measure Expansivity and Specification in Pointwise Dynamics

*Abdul Gaffar Khan*

In this talk, we will discuss the significance of pointwise dynamics motivated from Reddy's work. We will study the concept of mixing, specification and chaos at a point in the phase space of a continuous map. We will prove that periodic specification points of a continuous map are Devaney chaotic points and the existence of two distinct specification points is sufficient for a uniformly continuous surjective map to have positive Bowen entropy. This will help to understand that pointwise dynamics can be used significantly to improve several well-known facts. We will further introduce pointwise measure expansive bi-measurable maps to establish that this approach can also be adopted to study the measure-theoretic aspects of dynamical systems. This is a joint work with P.K. Das and T. Das.