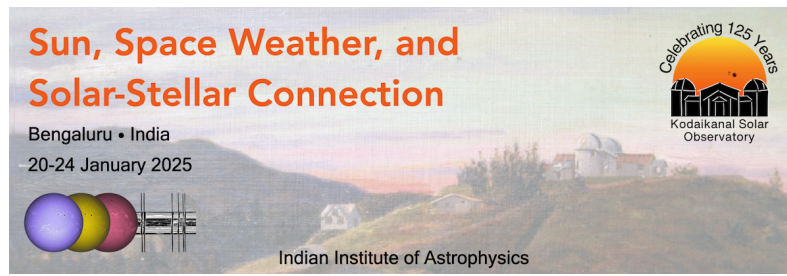


Sun, Space Weather, and Solar-Stellar Connection



Contribution ID: 112

Type: **Invited review talk**

Progress in Modelling Solar and Stellar Activity Cycles

Thursday, January 23, 2025 1:45 PM (25 minutes)

Understanding the solar activity cycle within the broader framework of stellar magnetic field dynamics is pivotal for comprehending the solar and stellar dynamos. A significant challenge in this pursuit lies in the presence of multiple branches in the relationship between stellar rotation and activity cycle period among main sequence stars. In this presentation, I will elucidate recent advancements addressing this challenge, drawing connections with mean-field dynamo theory and Direct Numerical Simulations (DNS). Additionally, I will explore the implications of these findings for the modelling of solar and stellar cycles.

Contribution Type

Theme

Solar - Stellar Connections

Primary author: BONANNO, Alfio Maurizio (INAF Osservatorio Astrofisico di Catania)

Presenter: BONANNO, Alfio Maurizio (INAF Osservatorio Astrofisico di Catania)

Session Classification: Solar/Stellar Dynamo and Activity