

Abstract Submitted
for the DFD20 Meeting of
The American Physical Society

Low dimensional chaos in the solar magnetic cycle? SUMIT VASHISHTHA, Florida Atlantic University, K.R. SREENIVASAN, New York University — The nature of dynamics underlying the solar-cycle remains unclear. Considerable work has been done to understand if it is stochastic or has the character of deterministic chaos. In this talk, the sunspot series is analyzed using direct dynamical tests for deterministic chaos. A model based on the findings is constructed and the possible role of planetary influence on the solar cycle through a stochastic-resonance like mechanism is explored.

SUMIT VASHISHTHA
Florida Atlantic University

Date submitted: 10 Aug 2020

Electronic form version 1.4