

## **American Geophysical Union (AGU) Fall Meeting**

11-15 December, 2017, New Orleans, USA

<https://fallmeeting.agu.org/2017/>

### **Session SH004: Observations, Modeling, and Predictions of Solar Activity From the Deep Interior to the Corona**

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Solar activity is a manifestation of magnetic self-organization processes that involve complex dynamical coupling of various layers of the Sun acting over a broad range of spatial and temporal scales. Synergy of observational, theoretical, and modeling efforts is key to understanding solar activity variation, dynamics, and evolution and to developing reliable physics-based forecasts of long-term solar cycles and short-term activity manifestations, “seasons of solar activity”, such as periods of enhanced flaring and CME activity. The session welcomes observers, modelers, and theoreticians to share their results and ideas and to discuss current challenges, development of emerging fields (such as data assimilation), and the analysis of historical and modern observational data using theoretical modeling, interpretations, and predictions.