

## **SESSION: (A3) S2S ensemble predictions and forecast information**

### **(A3-04)**

#### **Regime-dependent predictability and forecast error spectra of initialized forecasts**

Berner, Judith

NCAR, USA

Recent work has demonstrated that forecasts initiated from states that project onto certain large-scale patterns typically associated with low-frequency variability, can exhibit extended forecast skill. So are e.g. forecasts initialized in the negative phase of the North Atlantic Oscillation more skillful over the Euro-Atlantic sector than average.

Here we will use the S2S database to investigate if these findings carry over to other modes of variability, such as e.g. the Pacific North American pattern (PNA). We will determine if initialization from a positive or negative PNA phase in the S2S database are associated with changes in sub-seasonal predictability.

Finally we examine the forecast error growth of these initialized forecasts in an attempt to link extended predictability to the classical predictability theory proposed by Lorenz (1969).