### **SESSION: Plenary**

## (PL-08)

# Subseasonal to Decadal Prediction: Looking back on 40 years of progress - and projecting forward another 40 years

### Palmer, Tim

#### University of Oxford

In this talk I want to reflect back on some of the key successes across the range of initialised predictions on the sub-seasonal to decadal timescales over the last 40 years. This includes the first ensemble forecast systems, the first dynamical predictions of El Nino and the development of links between decadal modes of sea temperature variability and Sahel Drought. However, over these 40 years, predictive skill has been compromised by persistent model systematic error. Model intercomparison programmes have shown that model biases are only slowly reducing over time. For the sake of society, we must start accelerated programmes of research to eliminate them. Some suggestions on how to do this will be outlined.