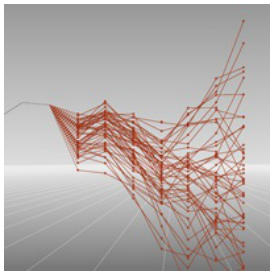

Contribution ID: **48** Type: **not specified**

# Statistical methods for verification of probabilistic forecasts at the extended and seasonal range

*Tuesday, 3 September 2019 16:00 (50 minutes)*

This seminar will review statistical methods for verification of probabilistic forecast at the extended and seasonal range. Transparent statistical modelling frameworks will be presented for modelling the distributional properties of forecasts and observations. It will be shown how such frameworks can provide complete verification summaries and be used to diagnose predictability issues such as over-dispersion in the forecasts (the so-called signal-to-noise paradox). The use of the statistical frameworks for quantifying uncertainty in skill and recalibrating forecasts will also be discussed. The use of Bayesian estimation will be presented as a means for addressing the issue of small sample sizes.

References

Siegert S, Stephenson D. (2018) Forecast recalibration and multi-model combination, Sub-seasonal to Seasonal Prediction: The Gap Between Weather and Climate Forecasting, Elsevier. Editors: Andrew Robertson & Frederic Vitart, 585 pages.

Siegert S, Stephenson DB, Sansom PG, Scaife AA, Eade R, Arribas A. (2016) A Bayesian framework for verification and recalibration of ensemble forecasts: How uncertain is NAO predictability?, Journal of Climate, volume 29, no. 3, pages 995-1012.

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**Session Classification:** Session 2: Physical processes, modelling and initialization requirements