

## **Hedging weather risk in energy markets**

Fred Espen Benth

University of Oslo  
Department of Mathematics  
Norway

With a large renewable power production, actors in the energy markets are exposed to weather risk. Various weather-related derivatives products exist for managing this risk, both traded on exchanges and in bilateral contracts. In this talk we review work on stochastic modeling of wind, solar irradiation and temperature, weather variables impacting supply and demand of power. We further analyse the risk premium when pricing weather derivatives, as well as a hedging problem for basis risk, relevant for producers and retailers in the energy market.