Title: Scoring Beliefs

Abstract: Inductive logicians have long been thinking about how to best predict future events based on the available evidence. Traditionally, these predictions are given in terms of probability functions that are calibrated to the evidence at hand.

This raises two important questions: A) Why is this approach justified? B) How can we measure which prediction is ``best''?

A) Until rather recently the justification question was standardly answered by appealing to Dutch Book Arguments (DBA) and the Principal Principle (PP). DBAs have begun to lose their once widespread appeal [Hàjek 2008]. Epistemic Scoring rules have emerged as an important tool for the justification of the probability norm [Joyce 1998].

B) Measuring the performance of (probabilistic) forecasters is a longstanding problem. That is how (strongly) do future events confirm a given prediction? Classical works in this area for probabilistic forecasters are [Brier1950] and [Savage1971] which led to the notion of statistical scoring rules, cf. [Gneiting and Raftery 2007].

In this talk I shall compare the epistemic and statistical notion of a scoring rule. A point of emphasis will be the distinction of the use of scoring rules for *rational belief formation* and *belief elicitation*, which may easily be conflated. The goal of this talk is to highlight differences and similarities of the approaches without taking sides.