

**THE CHINESE UNIVERSITY OF HONG KONG**

*Department of Statistics*

will present a seminar entitled

**On Generalized Fiducial Inference**

by

**Professor Jan Hannig**  
**Department of Statistics and Operations Research**  
**University of North Carolina at Chapel Hill**

on

**Tuesday, 20 October 2009**  
**2:00pm – 3:00pm**

in

**Lady Shaw Building G36**  
**The Chinese University of Hong Kong**

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**Abstract:**

R. A. Fisher's fiducial inference has been the subject of many discussions and controversies ever since he introduced the idea during the 1930's. The idea experienced a bumpy ride, to say the least, during its early years and one can safely say that it eventually fell into disfavor among mainstream statisticians. However, it appears to have made a resurgence recently under the label of generalized inference. In this new guise fiducial inference has proved to be a useful tool for deriving statistical procedures for problems where frequentist methods with good properties were previously unavailable. Therefore we believe that the fiducial argument of R.A. Fisher deserves a fresh look from a new angle.

In this talk we first generalize Fisher's fiducial argument and obtain a fiducial recipe applicable in virtually any situation. We demonstrate this fiducial recipe on examples of varying complexity. We also investigate, by simulation and by theoretical considerations, some properties of the statistical procedures derived by the fiducial recipe showing they often possess good repeated sampling, frequentist properties.

Portions of this talk are based on a joined work with Hari Iyer and Thomas C.M. Lee.

**All are Welcome**