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10. Oktober 2012

Einladung zum Vortrag

von

Dr. Tim Brereton

UNIVERSITY OF QUEENSLAND, AUSTRALIA

Adaptively Determining Importance Sampling Mixture Densities

A common problem in applied probability is estimating rare event probabilities efficiently. Importance sampling is the standard technique for improving the efficiency of such estimators. Often, rare events can occur in more than one way. For example, the absolute value of a random variable will exceed a given threshold either if the random variable is too large or too small. In such a setting, the appropriate importance sampling density is a mixture. In this talk, we will discuss how to identify the components of a good importance sampling density using adaptive Monte Carlo techniques. These techniques adapt the classical theory of asymptotically efficient estimators to take advantage of a small initial sample from the zero-variance density (obtained either by MCMC or acceptance-rejection sampling).

Termin: **Dienstag, 04. Dezember 2012, 14:15 Uhr**

Ort: **Universität Ulm, Helmholtzstr. 18, Raum 220**

Interessenten sind herzlich eingeladen.

gez. V. Schmidt