

Terry LYONS
Oxford-Man Institute
Eagle House, Walton Well Road
Oxford-Man Institute OX2 6ED
Tel: 01865 616608

Title:

Cubature on Weiner space: Managing weighted scenarios to high order.

Abstract:

Capturing the distribution of relatively rare events can be important to effective and reliable modelling. However the normal analysis using the mean and the covariance are only second order and do not have the appropriate level of richness. Starting with the Kusuoaka/ Lyons/Victoire algorithms made more useful by the re-combinations of Litterer/Lyons a number of new techniques have been developed. Taken together they provide powerful tools for accurately solving PDE's and for managing scenarios.