Meeting: 1005, Newark, Delaware, SS 6A, Special Session on High Dimensional Probability

Fuchang Gao\* (fuchang@uidaho.edu), Department of Mathematics, P.O.Box 441103, University of Idaho, Moscow, ID 83844, and Wenbo Li. Riesz product and small ball probabilities for the Slepian Gaussian Fields.

Riesz product techniques are introduced into the study of small ball probabilities for Gaussian random fields. When applied to the two-dimensional Slepian field, this probabilistic and analytic method enables us to obtain the small ball probability under the sup-norm, through some standard estimate and straightforward calculations. (Received January 31, 2005)