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9. Mai 2012

Einladung zum Vortrag

von

Professor Dr. Daryl J. Daley

UNIVERSITY OF MELBOURNE

Dimension walks and Schoenberg spectral measures for isotropic random fields

Schoenberg (1938) showed how Bochner's basic representation theorem for positive definite functions (e.g. the correlation function of a stationary stochastic process) `simplifies' for spatial processes (d-dimensional random fields) which are isotropic: the standard Fourier kernel function is replaced by the characteristic function of a random direction in d-space and the spectral measure, instead of being on d-space, is on the positive half-line. The talk describes how Wendland's `dimension walks', which were defined earlier by Matheron as Descente and Montee in studying relations between d-D and either (d+2)-D or (d-2)-D correlation functions, are equivalent to simple modifications of their d-Schoenberg measures. Another family of dimension walks arises from projections from unit d-spheres to lower dimensional spheres, first via the kernel functions in the Schoenberg representation and then more generally, for d-Schoenberg measures.

Termin: **Donnerstag, 21. Juni 2012, 17 Uhr, c.t.**

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

Der Vortrag findet im Rahmen des Mathematischen Kolloquiums statt.
Interessenten sind herzlich eingeladen.

gez. V. Schmidt