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Minisymposium 6 - Positive definite functions and applications

Positive definite sequences on polynomial hypergroups and the discrete part of their spectral measures

RUPERT LASSER (GSF–NATIONAL RESEARCH CENTER FOR ENVIRONMENT AND HEALTH & MU-NICH UNIVERSITY OF TECHNOLOGY)

Given a positive definite bounded sequence $(d_n)_{n\geq 0}$ on a polynomial hypergroup, Bochner's theorem yields a bounded positive Borel measure on the dual space. We derive results describing when and how the discrete part of this measure can be determined completely from the sequence $(d_n)_{n\geq 0}$ by applying certain average processes. In that way we generalize results of Ky Fan and N. Wiener.