

1038-60-144

Jason T Shaw* (jshaw@truman.edu), 606A S Jamison, Kirksville, MO 63501. *A continuous spectral density for a random field of continuous-index.*

A short history will be given on the results that led to finding a continuous spectral density function for a continuous-indexed random field. Linear dependence coefficients are defined for random fields of continuous-index, which are modified from those already defined for random fields indexed by an integer lattice. When a selection of these linear dependence conditions are satisfied, the random field will have a continuous spectral density function. Showing this involves the construction of a special class of random fields using a standard Poisson process and the original random field. (Received February 05, 2008)