University of California, Irvine
Statistics Seminar

Estimating a Covariance Function from Fragments of Functional Data

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4 p.m., Tuesday, May 19, 2020
Join via Zoom: https://uci.zoom.us/j/700695554
Meeting ID: 700 695 554

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Functional data are often observed only partially, in the form of fragments. In that case, the standard approaches for estimating the covariance function do not work because entire parts of the domain are completely unobserved. In previous work, Delaigle and Hall (2013, 2016) have suggested ways of estimating the covariance function, based for example on Markov assumptions. In this work we take a completely different approach which does not rely on such assumptions. We show that, using a tensor product approach, it is possible to reconstruct the covariance function using observations located only on the diagonal of its domain.