The Iby and Aladar Fleischman
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Simple sufficient condition for inadmissibility of Moran's single-split test.

Royi Jacobovic his Ph.D. in statistics from The Hebrew University of Jerusalem

The lecture will be held on 15 March 2022, 14:00 PM Room 206 & via Zoom
https://tau-ac-il.zoom.us/j/81388449216?pwd=QU91L0pXVHc0dS90bFZaUjBoS1FkZz09#success

Abstract:
Suppose that a statistician observes two independent variates X1 and X2 having densities fi(_; _) _ fi(_ □ _) ; i = 1; 2 , _ 2 R. His
purpose is to conduct a test for:
H : _ = 0 vs. K : _ 2 R n f0g
with a pre-de_ned signi_cance level _ 2 (0; 1). Moran (1973) suggested a test which is based on a single split of the data, i.e., to use X2 in order to conduct a one-sided test in the direction of X1. Speci_cally, if b1 and b2 are the (1 □ _)'th and _'th quantiles associated with the distribution of X2 under H, then Moran's test has a rejection zone
(a;1) _ (b1;1) [(□1; a) _ (□1; b2)
where a 2 R is a design parameter. Motivated by this issue, the current work includes an analysis of a new notion, regular admissibility of tests. It turns out that the theory regarding this kind of admissibility leads to a simple su_cient condition on f1(_) and f2(_) under which Moran's test is inadmissible.

Bio:
Royi Jacobovic will join NETWORKS program from April 2022 as a PostDoc at University of Amsterdam (UvA) under the supervision of Prof. Michel Mandjes. Royi received his Ph.D. in statistics from The Hebrew University of Jerusalem in October 2020 under the supervision of Prof. Offer Kella. Since that time, he has been a postdoctoral researcher at University of Haifa and The Hebrew University of Jerusalem. His research includes different topics in applied probability, stochastic operations research and mathematical statistics.