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## HeiKaMEtrics-Seminar

Joint Heidelberg, Karlsruhe and Mannheim research seminar in Econometrics

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### Cumulated Sum of Squares Statistics for Non-linear Non-stationary Regressions

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**Tuesday, March 21, 2017, 12:00 - 13:30h**

**University of Mannheim, L9, 1-2, R 002**

#### **Abstract:**

We show that the cumulated sum of squares statistic has a standard Brownian bridge-type asymptotic distribution in non-linear regression models with (possibly) non-stationary regressors. This contrasts with cumulated sum statistics which have been previously studied and whose asymptotic distribution has been shown to depend on the stochastic properties of the regressors. We also show that the power properties of the test is comparable in a wide range of situations.