

Einladung zum Würzburger Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Fakultät für Mathematik und Informatik

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Kalman Filtering from an Optimization Perspective

Mittwoch, 22. Apr. 2015 • 16:15 Uhr

Raum SE 40, Mathematik Ost, Emil-Fischer-Str. 40, Campus Hubland-Nord

Inhaltsangabe

We review that classical notion of Kalman filters for state estimation in dynamical systems. We then reformulate the estimation problem as an optimization problem and show how this perspective allows one to overcome many of the perceived barriers to extending the basic model to a wide range of novel settings. In particular, we show how to extend the model to nonlinear settings involving state constraints, non-Gaussian densities, outliers, sparsity, trend shifts, and state dependent covariances. Illustrations of these ideas on numerical simulations as well as real data sets will be presented.



www.mathematik.uni-wuerzburg.de/kolloquium.html

Zu diesem Vortrag laden wir Sie herzlich ein.
Im Anschluss an die Vorträge stehen Kaffee und Tee im Foyer vor dem SE 40 bereit.

Die Dozentinnen und Dozenten der Mathematik

