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**21. März 2016**

## Einladung zum Vortrag

von

**PD Dr. David Ginsbourger**

Idiap Research Institute and University of Bern

## Positive definite kernels for deterministic and stochastic approximations of invariant functions

Positive definite kernels have been used as a basic brick in function approximation, notably via the theory of reproducing kernel Hilbert spaces. In addition, they play a crucial role in Gaussian random field modelling through the notion of covariance. Here we consider the problem of approximating functions known to be invariant (or degenerate) under specific classes of linear operators, and we present some implications in kernel methods. In particular, simulation and prediction examples are used to illustrate how Gaussian random field models can incorporate a number of "structural priors" including group invariances, multivariate sparsity, or harmonicity as particular cases.

**Termin: Freitag, 15. April 2016, 9 Uhr**

**Ort: Universität Ulm, Helmholtzstr. 22, Raum 202**

Interessenten sind herzlich eingeladen.

Der Vortrag findet im Rahmen des Mathematischen Kolloquiums statt.

gez. E. Spodarev