Institut für Mathematische Stochastik

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Einladung

Im Stochastik-Kolloquium spricht

Prof. Dr. Ursula Gather
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über das Thema

Model selection and examples: histogram construction, nonparametric regression

Der Vortrag findet statt am

Mittwoch, 02. November 2005 um 11:15 Uhr

im

Seminarraum der Stochastik, Maschmühlenweg 8 - 10

Es laden ein: die Dozenten des Instituts für Mathematische Stochastik

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Abstract.
The construction of a histogram from real-valued data is a well-known and 'simple' task. We put this task, as well as other ones such as nonparametric regression, into the general framework of model selection, considering criteria such as AIC, BIC, MDL, Cross-validation, Hellinger-distance as well as new criteria. It will be shown that there is no overall best procedure for histogram construction nor for other tasks. The results of several simulation studies will be presented, showing merits and deficiencies of selected methods.

References
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Keywords
DENSITY ESTIMATION, MODEL SELECTION, REGRESSION, PENALIZED LIKELIHOOD, REGULAR HISTOGRAM, TAUTSTRING