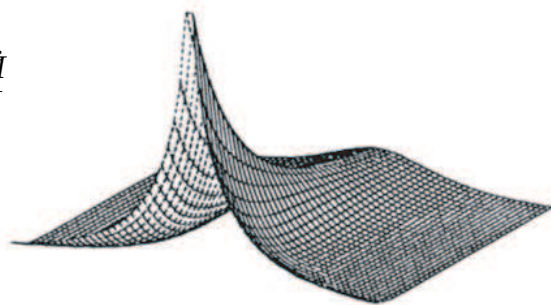*Кафедра* **ТЕОРИИ ВЕРОЯТНОСТЕЙ**

БОЛЬШОЙ СЕМИНАР КАФЕДРЫ ТЕОРИИ ВЕРОЯТНОСТЕЙ
Руководитель - академик РАН, профессор А. Н. Ширяев

22 февраля –   **В. Г. Спокойный** (WIAS, ПреМоЛаб)
Semiparametric alternation: convergence and efficiency

A general problem of semiparametric estimation is considered when the target parameter θ describing the model structure has to be estimated under the presence of the high dimensional nuisance η.

The alternating approach assumes that the partial estimation of η under the given target θ and vice versa can be done efficiently even in large dimension because the related problem is convex or even quadratic.

This naturally leads to the procedure based on sequential optimization: one starts from some initial value of θ or η and then sequentially estimates one parameter with the other one fixed.

Unfortunately, precise theoretical results addressing the overall quality of such procedures are only available in special cases. One example is given by linear models. In this case, an alternating procedure converges and is efficient under quite simple and tractable identifiability conditions.

We propose a novel approach to systematic study of the quality and efficiency of such iterative procedures which can be viewed as a non-asymptotic analog of the Le Cam LAN theory. It allows for extending the algorithmic properties of the procedure like geometric convergence and efficiency from the linear to a general regular case.

Семинар проводится по средам в аудитории 16-24
с 16:45 до 17:45

Координатором семинара на весенний семестр 2012 года назначен д.ф.-м.н., профессор
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