<div align="center">Abstract of Oberwolfach Workshop 1608b:</div>

Date:

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Title:

**New Developments in Functional
and Highly Multivariate Statistical Methodology**

Organisers:

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This workshop will focus on recent developments in statistical techniques for highly multivariate data and functional data. The key issue is to subtract from the data valid conclusions regarding the stochastic process that led to the observed data, and further, amongst other objectives, to perform good predictions for a quantity of interest including quantification of statistical uncertainty. For highly multivariate and complex data standard statistical techniques can be inappropriate and the selection and estimation of significant effects, as well as the identification of interaction effects, are challenging tasks. The analysis of functional data requires the development of new statistical concepts and techniques. We focus on some challenging open research issues for which we want to stimulate scientific discussions. Topics include for functional data: statistical inference, classification and clustering, modeling dependencies, dimension reduction. For highly multivariate data: flexible regression models, variable selection, dispersions and dependencies, dimension reduction, inverse problems.

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