

Model reduction and efficient linear algebra techniques for direct and inverse problems

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Short Description

The constantly increasing demand for accurate simulations in scientific and industrial applications has led to high-resolution complex models that can be adapted to take into account possibly large datasets of observations. This requires the treatment of large-scale algebraic objects, the development of reduced models, and efficient techniques to incorporate the information from the data. This minisymposium highlights recent developments in Model Order Reduction, Numerical Linear Algebra, and Data Assimilation that serve the purpose of reducing the complexity of high dimensional simulations for direct and inverse problems.