# The balancing principle beyond its primary use

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**Abstract**

The balancing principle has its origin in Statistics, where it had the form of a rule to equate the bias of a statistical estimator with its variance. Starting with a paper by Reinhold Schneider and his co-authors (2003) the idea of the balancing principle is being developed by several authors and in several areas of Numerical Analysis, including regularization of ill-posed problems, interior penalty discontinuous Galerkin methods and supervised learning. In the present talk we are going to give a short overview of some of these recent developments.