

Leonhard Summerer, Recent advances in simultaneous approximation and the generalization of Jarnik's identity.

In this talk I will give an overview of some recent advances in simultaneous approximation related to the geometric approach introduced by Schmidt and the speaker. In particular, I will focus on several aspects of a Theorem of D. Roy which in some sense completes this geometric method. Its remarkable consequences will be illustrated by means of the example of O. German's improvement of Jarnik's Theorem on the relation between uniform approximation constants.