SFB Colloquium Series

It is a pleasure to announce a guest lecture with the title

Solvable integration problems and optimal sample size selection

SPEAKER: **Daniel Rudolf**, Universität Göttingen
TIME: 15. 01. 2019, 12:00
LOCATION: JKU Linz, MT 226/1

Abstract:
We consider the problem of the computation of the expectation of a random variable based on iid samples in scenarios where the variance of the random variable is unknown. Based on variance estimation we construct an algorithm and provide an upper bound of the complexity when the considered random variables satisfy additional assumptions, for example have a bounded kurtosis. It turns out here that an error criterion based on "small difference with high probability" is the right one to investigate. We also provide lower bounds on the complexity of the problem which show that our algorithm is optimal.