

Consistency of randomized integration methods

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We study structured Monte Carlo methods, such as averages based on random point sets, and show that a class of methods consistently estimates expectations of integrable functions. Consistency here refers to convergence in mean and/or convergence in probability of the estimator to the integral of interest. Moreover, we consider median modified methods and show for integrands in L^p with $p > 1$ consistency in terms of almost sure convergence. The talk is based on joint work with Daniel Rudolf.