

On Estimation of L^p -Errors of Itô-Riemann-Type Numerical Quadratures for Stochastic Integrals Along Wiener Paths

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ABSTRACT: The L^p -error and its rate of convergence of numerical quadratures of non-anticipative Itô integrals (see Itô, 1944) based on Itô-Riemann sums along non-random partitions of Wiener paths are studied. Simple examples with non-Lipschitzian integrands are given as well. The main results can be extended to stochastic integrals along diffusion processes (see upcoming papers of the author).