

The Young Integral

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Abstract

The usual Riemann Integral acts on the integrand functions with respect to the identity, which measures the real intervals $[a, b]$ as $b - a$, that is an integration over a straight line. Nevertheless sometimes the need to integrate over different paths arises, and this is where Riemann-Stieltjes integrals comes out. This integral, denoted by $\int_a^b f(x) dg(x)$, has some limitations due to the hypothesis required from the pair (f, g) ; in particular a minimal regularity is required from these functions.

The Young Integral is a tool which allows to extend this kind of integration to more irregular pairs of functions.

References

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