

About the operator-norm convergent Trotter-Kato product formulæ

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In this lecture I would like to present a short overview of the recent book *Trotter-Kato Product Formulæ* (Springer-Birkhäuser 2024). It summarises results about the *operator-norm* convergence of the product formulæ in the Hilbert and Banach spaces. These results reflect a contemporary generalisation of the well-known *strongly* convergent H.Trotter (1959) and T.Kato (1978) product formulæ to convergence in the *operator-norm* topology.

The latter was initiated in 1993 by Dzh.L.Rogava and subsequently much developed, in particular, by the authors of this book, see:

Valentin A. Zagrebnov, Hagen Neidhardt, Takashi Ichinose,
Trotter-Kato Product Formulæ, Springer-Birkhäuser 2024, pages XX, 873,
<https://link.springer.com/book/10.1007/978-3-031-56720-9>