# A Hilbert space perspective on ordinary differential equations with memory term.

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We discuss ordinary differential equations with delay and memory terms in Hilbert spaces. By introducing a time derivative as a normal operator in an appropriate Hilbert space, we develop a new approach to a solution theory covering integro-differential equations, neutral differential equations and general delay differential equations within a unified framework.

The talk is based on a joint work with A. Kalauch, R. Picard, S. Siegmund, and S. Trostorff.