

Fachgebiet Analysis  
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Prof. Dr. Friedrich Sauvigny

Fachgebiet Optimierung  
Prof. Dr. Sabine Pickenhain

Fachgebiet Optimale Steuerung  
Prof. Dr. Gerd Wachsmuth



## Forschungsseminar Analysis und Optimierung Sommersemester 2026

Im Rahmen des Forschungsseminars spricht am **Donnerstag, den 11. Juni 2026**

**Oscar Jentsch**  
TU Berlin

**Titel:** Theory of nonlinear semigroups

**Inhalt:** We study the existence of solutions to an abstract first-order initial value problem governed by a nonlinear operator in a Banach space setting. The evolution is driven by accretive (in particular  $m$ -accretive and related) operators and is linked to nonlinear semigroup theory. The main goal is to establish existence and uniqueness results for mild, strong, and (right-sided) classical solutions. The presentation unifies classical results in nonlinear semigroup theory, in particular the Crandall–Liggett theorem and the Crandall–Pazy approach to infinitesimal generators and connects them to the theory of completely accretive operators in  $L^1$ -spaces.

**Weitere Details zum Seminar:** Der Vortrag findet in Raum HG 3.35 des Zentralcampus Cottbus der BTU statt.