



# Allgemeines Physikalisches Kolloquium

Donnerstag, 24.10.2024 - 16 Uhr c.t.



**Apl. Prof. Dr. Svetlana Gurevich**

Universität Münster

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## Dynamics and control of optical pulses in time-delayed micro-cavities

Real-world complex systems can be strongly influenced by time delays due to unavoidable finite signal propagation speeds and time-delayed dynamical systems have proven to be a fertile framework for the modeling of nonlinear phenomena. Nonlinear laser dynamics is one of the fields where time-delayed systems are frequently employed to model the arising complex dynamics. In this talk, we will explore the use of time-delayed models to describe the dynamics of ultrashort pulses in optical micro-cavities, highlighting their potential for optical frequency comb generation.