International Monthly Seminar on Time Scales Analysis

Saturday, September 20, 2025 - Saturday, May 23, 2026

Scientific Program

Foundations of Time Scales
Core theory of time scales calculus, including delta and nabla derivatives, as well as the structure of measure chains that unify continuous and discrete analysis.

Dynamics & Qualitative Behavior
Exploration of stability, oscillatory behavior, and periodic solutions, with a focus on existence and uniqueness results within the framework of dynamic equations on time scales.

Numerical Approaches
Discussion of discretization strategies, computational algorithms, and simulation techniques designed specifically for dynamic systems modeled on time scales.

Applications Across Disciplines
Demonstration of the versatility of time scale theory in applied contexts such as control systems, biological modeling, epidemiology, economics, and signal processing.

Fractional Time Scales
Investigation of fractional dynamic equations that incorporate memory effects, hereditary behaviors, and nonlocal dynamics within the time scales framework.

Hybrid & Impulsive Systems
Study of systems that integrate discrete and continuous behaviors, with attention to impulsive effects, jump conditions, and hybrid modeling techniques.