

Seminário

Dynamics of Cohen-Grossberg Neural Networks: Periodic Solutions and Exponential Stability

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Abstract: This talk explores the existence of periodic solutions and the global exponential stability of a general non-autonomous differential system with infinite delays in a convenient phase space. We establish a crucial stability criterion based on the interplay of non-delay and delay terms, and employ the coincidence degree theorem to check the existence of periodic solutions. Our focus extends to a generalized higher-order periodic Cohen-Grossberg neural network model with discrete-time varying and infinite distributed delays. Comparative analysis with existing literature and illustrative numerical examples underscore the significance of our finding.

- **Dia:** 09 Novembro 2023, às 15h00min;
- **Local:** Sala de Reuniões, Departamento de Matemática, UBI.