# CCSU

DEPARTMENT OF MATHEMATICAL SCIENCES

# COLLOQUIUM

Friday, May 6 3:00 – 4:00 PM Maria Sanford, Room 101

## COMPLEX ANALYSIS AND BOUNDS ON THE NUMBER OF PERIODIC SOLUTIONS OF DIFFERENTIAL EQUATIONS WITH AN APPLICATION TO A NEURAL MODEL

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### Part 2: An Application to a Neural Model

#### ABSTRACT

Ilyashenko's method is applied to a well-known model of a neuron or a pool of neurons.

**<u>Remark:</u>** Both talks are based on the paper *Complex Methods for Bounds on the Number of Periodic Solutions with an Application to a Neural Model*, American Mathematical Monthly, February 2022. The paper is available to open-access download at <a href="https://maa.tandfonline.com/doi/full/10.1080/00029890.2022.2005389#.Yly9QNPMLIU">https://maa.tandfonline.com/doi/full/10.1080/00029890.2022.2005389#.Yly9QNPMLIU</a>

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