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**YUAN YUAN**, Memorial University of Newfoundland

*Bogdanov–Takens Singularity in Van der Pol’s Oscillator with Delayed Feedback*

In this talk, we study the classical Van der Pol’s equation with delayed feedback. We investigate the Bogdanov–Takens singularity and bifurcation occurring in the system with the variation of the original parameters by using the normal form method, and predict the suitable choice in the feedback control in order to obtain the asymptotic stable state.