The Department of Computer Science and Engineering

University of Nevada, Reno

cordially invites you to a Master's colloquium

A Python Library for Ion Channel Modeling

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science
with a major in Computer Science and Engineering.

by

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Abstract:

The creation and simulation of ion channel models using continuous-time Markov processes is a powerful and well-used tool in the field of electrophysiology and ion channel research. While several software packages exist for the purpose of ion channel modeling, none are available as a Python library. In an attempt to provide an easy-to-use, yet powerful Markov model-based ion channel simulator, we have developed ModFossa, a Python library supporting easy model creation and stimulus definition, complete with a fast numerical solver, and attractive vector graphics plotting.

1:00 pm, Wednesday, May 29, 2013

Scrugham Engineering and Mines (SEM) room 201

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