12th Annual Workshop on Topology and Dynamical Systems
Nipissing University, May 25–29, 2015
http://topology.nipissingu.ca/workshop2015/

Commuting maps on a triod

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Abstract: In 1969, Bing asked whether each tree-like continuum has the fixed-point property. Bellamy answered this question in the negative in 1980. A subset of this problem, "*Does every triod-like continuum have the fixed-point property?*" was later asked by Hagopian, and is still open. A positive answer to the related problem, "*Do there exist two commuting maps of a triod onto itself that do not have a coincidence point?*" would lead to a very simple example of a triod-like continuum with a fixed-point free map.

In this talk I will discuss using high-performance distributed computing to search for an answer to this question, as well as ways to considerably reduce the search space.