



**Department of Mathematics, Statistics and Computer Science
St. Francis Xavier University
Presents**

**A Generalized Tool For Deriving Connectomes in Support Of
Computational Neuroscience**

by
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M.Sc. Thesis Proposal Presentation

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This research intends to establish a framework in which to perform connectomic measurements of tens of thousands of data points across all major brain regions. A user shell will be developed to first derive these connectomes, and then provide mechanisms to quickly extract and analyze the calculated data of interest. Machine learning algorithms will demonstrate the application of computational neuroscience by discovering patterns consistent with autism patients. The objective is to provide a generalized tool that can extract data for multiple uses.