



PIMS / AMI Distinguished Lecture

Friday, October 26, 2018
3:00 p.m.
CAB 657

“Ion Transport: Modeling and Computation”

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Abstract

In this talk I will present some of the work done by my group on ion transport. The first part is on the analysis and computation of the Poisson-Nernst-Planck (PNP) model. We show that under normal physiological conditions, the PNP system can be approximated by a simpler electro-neutral model, which is easier to solve than the original PNP model. The second part of the talk is on ion transport in biological tissues (eye lens and brain cortex) based on a bi-domain approach.