

*Department of Mathematics,  
University of California San Diego*

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## Advancement to Candidacy

**Brian Tran, Graduate Student**

UC San Diego

# Variational Discretizations of Lagrangian and Hamiltonian Field Theories

### Abstract:

In this talk, after discussing the necessary background material, I will discuss the main results of my recent work *Variational Structures in Cochain Projection Based Discretizations of Lagrangian PDEs* and *Multisymplectic Hamiltonian Variational Integrators*; this is joint work with Prof. Melvin Leok.

Building on these ideas, I will conclude by discussing future research directions.

Advisor: Melvin Leok

**Friday, April 23, 2021**

**1:00 PM**

**Zoom ID 858 534 2126**

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