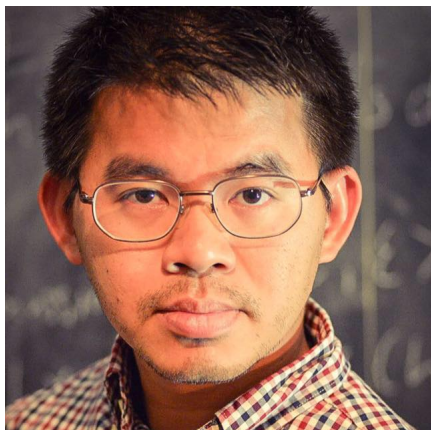


Mathematics and Physics Seminar Series



Announcing

A Seminar Presentation

on Tuesday

April 2, 2019

at 3.00 pm in

Dodd's Hall 102 A

at The University of New Haven

Simulating Crystal Growth Using Kinetic Monte Carlo Method

— **Khoa Dinh**
PhD Candidate
University of Tennessee

Abstract: Snowflakes, diamonds and table salt are some crystals that we encounter daily. To simulate crystal growth, Kinetic Monte Carlo (KMC) method is a commonly used tool. This method allows us to tune different physical parameters and observe possible effects at atomistic scale. In this talk, we will discuss the implementation of KMC method in the study of crystal growth during molecular beam epitaxy (MBE). In particular, we examine meandering instability during step-flow growth. In the square lattice case, we find that facets with the orientation favored in the equilibrium shape of isolated islands are most prone to this instability.

Further Information

For further information, please contact Dr. Yasanthi Kottegoda at the Department of Mathematics and Physics, Office: Maxcy 315, 203-932-1206, YKottegoda@newhaven.edu.