<u>**Title</u>**: Qualitative aspects of evolution PDE Chris Henderson</u>

<u>Abstract</u>: In this talk, I will go over various evolution equations, that is, partial differential equations (PDE) in which time is a variable, and approaches to understanding what their solutions "look like" -- how big or small they are, how they spread, how smooth they are, etc. The focus will be on how mathematicians (rigorously) study physically interesting phenomena in PDE.