

## Colloquium

November 30, 4:05 p.m. (9<sup>th</sup> Period) (in the Atrium)

Speaker: Dr. Tracy Stepien

**Title**: Traveling Waves in a Model of Cell Migration With a Moving Boundary

Abstract: Cell migration plays an important role in maintaining the cohesion of cell layers, in wound healing, and in embryonic development. When modeling these processes using partial differential equations, various forms of solutions such as self-similar solutions and traveling wave solutions arise. In this talk, we analyze the existence and uniqueness of traveling waves for a generalized Stefan problem arising from a model of cell migration.