



Mathematical Biology Seminar

Monday, January 29, 2024

3 pm MDT - 457 CAB (in person)

Join Zoom Meeting

<https://ualberta-ca.zoom.us/j/98497695684?pwd=SG5pcUVR50xucW5xd0xBTm1VVcUUtEUT09>

Meeting ID: 984 9769 5684

Passcode: 32123



Hans Othmer

School of Mathematics

University of Minnesota

Mathematical and Computational Problems in Cell Motility

Cell locomotion is essential for early development, angiogenesis, tissue regeneration, the immune response, and wound healing in multicellular organisms, and plays a very deleterious role in cancer metastasis in humans. Locomotion involves the detection and transduction of extracellular chemical and mechanical signals, integration of the signals into an intracellular signal, and the spatio-temporal control of the intracellular biochemical and mechanical responses that lead to force generation, morphological changes and directed movement. We will discuss some of the mathematical and computational challenges that the integration of these processes poses and describe recent progress on some component processes.