

# Center for Biocomplexity Colloquium

**Zhian Wang**  
IMA  
University of Minnesota

***“Kinetic Models for Mesenchymal Motion”***

Tuesday October 7, 2008

4:00pm

356 Fitzpatrick Hall

*\*Tea at 3:30pm\**

Mesenchymal motion describes the cell migration in network tissues resulting from the interactions between cells and fibers including contact guidance and tissue remodeling. An example is the invasion of tumor metastases through collagen fibers. Based on the modeling paper by Hillen (T. Hillen, J. Math. Biol., 53(2006): 585-616), we will investigate the model in both one dimension and higher dimensions, including traveling waves, network type steady states, measure-valued solutions and macroscopic limits. We present the network pattern formation and the biological implications. Finally the further research development will be discussed.