1083-35-127 **Justin C Tzou***, tzou.justin@gmail.com, and **Yi-Ping Ma**, **Alvin Bayliss**, **Bernard J Matkowsky** and **Vladimir A Volpert**. *Homoclinic Snaking Near a Codimension Two Turing-Hopf Bifurcation Point in the Brusselator Model.* Preliminary report.

Spatiotemporal Turing-Hopf pinning solutions near the codimension two Turing-Hopf point of the one dimensional Brusselator model are studied. Both the Turing and Hopf bifurcations are supercritical and stable. The pinning solutions exhibit coexistence of stationary stripes of near critical wavelength and time periodic oscillations near the characteristic Hopf frequency. The solution branches are organized in a series of saddle-node bifurcations similar to snaking structures of stationary pinning solutions. We find two intertwined pairs of such branches, one with a defect in the middle of the striped region, and one without. These branches are connected to branches exhibiting collapsed snaking behavior. Time dependent depinning dynamics outside the saddle-nodes are illustrated, and a time scale for the depinning transitions is numerically established. Wavelength variation within the snaking region is discussed, and reasons for the variation are given in the context of amplitude equations. The pinning region is compared favorably to the Maxwell line found numerically by time evolving the amplitude equations. (Received August 24, 2012)