Speaker: **Kelly, Michael**
Title: *Coincidences of maps into the Klein bottle*
Authors: Michael Kelly and Daciberg Gonçalves
Affiliations: Loyola University-New Orleans and Universidade de Sao Paulo

Abstract: For coincidences between pairs of maps from the torus to the torus the Wecken problem has an affirmative solution, and the 1-parameter Wecken problem has a nice solution given in terms of the Nielsen coincidence number of the pair of maps. For surfaces in general any such classification appears to be difficult.

In this talk we consider these problems when the target space is the Klein bottle. We present some partial results for both the Wecken and the 1-parameter Wecken problems, and discuss the methods used. One such result is a surprising non-Wecken result. Namely, there exist pairs of maps from the torus to the Klein bottle such that the Nielsen coincidence number is zero, but the pair cannot be deformed to be free of coincidence points.