**Meeting:** 1003, Atlanta, Georgia, SS 1A, AMS Special Session on Current Events

1003-53-135 **Mei-Lin Yau*** (yau@math.msu.edu), A307 Wells Hall, Department of Mathematics, Michigan State University, East Lansing, MI 48824. *A surgery model on open books and their holomorphic curves.* Preliminary report.

It is known that a contact structure on a closed 3-manifold M is supported by an open book representation of M. By applying 0-surgery to every connected component of of the binding one gets a new manifold M' which is a mapping torus of a closed surface. Both RxM and RxM' can be endowed with R-invariant symplectic structures as well as R-invariant compatible almost complex structures.

In this talk we give, in the complex plane, a simple model of the 0-surgery. This model allows explicit relations between pseudoholomorphic curves in RxM and pseudoholomorphic curves in RxM', leading to a comparison between contact homology of M and a variant of periodic Floer homology of M' considered by Michael Hutchings and Michael Sullivan. (Received August 10, 2004)