1042-57-66 **Phil Eiseman**, **Jonathan D. Lima**, **Joshua M. Sabloff** and **Lisa Traynor***
(`ltraynor@brynmawr.edu`), Department of Mathematics, Bryn Mawr College, 101 N. Merion Ave,
Bryn Mawr, PA 19010. *Slices of Planar Lagrangians.* Preliminary report.

I will address the basic question: "What are possible shapes of planar Lagrangian submanifolds?" A natural way to examine the shape of a 2-dimensional Lagrangian in 4-space is to look at its "slices", i.e., its intersection with a sequence of parallel hyperplanes. I will discuss some curves that can and cannot be obtained as slices. I will also discuss how a slice of a Lagrangian at one height places restrictions on possible slices at other heights. Tools for studying these slices come from the theory of generating families. (Received August 07, 2008)