

(Philadelphia Area Topology with Contact and Hyperbolic emphasis)

Roger Casals, MIT & Jason Deblois, University of Pittsburgh

Friday September 23, 2016

All talks take place at Bryn Mawr College in Park Sciences 328

Morning Discussions 9:30 – 10:30 am Background session with Roger Casals

11 - 12 Background session with Jason Deblois

Lunch 12:30 – 2:30

Afternoon Talks 2:30 Roger Casals "Legendrian Graph Surfaces"

4:00 Jason Deblois "Packings of Hyperbolic Surfaces"

Dinner 5:30 - 7

Talk Abstracts:

Roger Casals "Legendrian Graph Surfaces"

In this talk we discuss Legendrian surfaces in the standard contact 5-sphere. The goal is to present ideas relating cubic planar graphs and Legendrian surfaces, elaborating on earlier work of E. Zaslow and D. Treumann. In particular, we will talk about Legendrian singularities, count trees and introduce a combinatorial invariant in graph theory. This is work in progress with E. Murphy.

Jason Deblois "Packings of Hyperbolic Surfaces"

In the morning talk, I'll introduce packing problems in general and some famous packing problems in particular. I'll discuss the related meshing problem, some of its standard solutions the Delaunay and Voronoi triangulations, and some of their advantages and shortcomings.

In the afternoon talk, I'll specialize to the problem of packing disks on complete hyperbolic surfaces of finite area. I'll exhibit the best density bounds that I know, and I'll show that they are sharp in some cases and not sharp in others.

Questions? ltraynor@brynmawr.edu