

# Minisymposium on Publicly Available Geometric/Topological Software

Chapel Hill, NC, United States

Part of the CG-Week 2012

## Minisymposium Program

**Sunday, June 17, 2012**

**14:20 – 15:50 Session 1: Persistent Homology**

*Invited talk:* Dionysus A brief overview  
*Dmitriy Morozov*

javaPlex: A research platform for persistent homology  
*Andrew Tausz, Henry Adams, Mikael Vejdemo-Johansson*

15:50 – 16:10 *Coffee Break*

**16:10 – 17:40 Session 2: Manifold Topology & Graph Drawing**

*Invited talk:* Using Regina to experiment and compute with 3-manifold  
triangulations and normal surfaces  
*Benjamin Burton*

The Open Graph Drawing Framework (OGDF)  
*Carsten Gutwenger*

---

**Tuesday, June 19, 2011**

**15:20 – 16:50 Session 3: Polytope Geometry & Rigidity Analysis**

*Invited talk:* An Introduction to polymake 2.12  
*Michael Joswig*

KINARI-Lib: a C++ library for mechanical modeling and pebble game  
rigidity analysis  
*Naomi Fox, Filip Jagodzinski, Ileana Streinu*

17:20 – 18:05 *Coffee Break*

**17:20 – 18:05 Session 4: Triangulations and Voronoi Diagrams**

*Invited talk:* Solving problems with CGAL: an example using  
the 2D Apollonius graph package  
*Menelaos I. Karavelas*

18:05 – 18:15 *Short Break*

**18:15 – 18:55 Demo Session**

GAP persistence – a computational topology package for GAP  
*Mikael Vejdemo-Johansson*

Besides tutorials, there will also be demos of the following software packages:  
– KINARI-Lib  
– javaPlex