<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, January 13, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- Nicholas Vlamis (U Michigan)</td>
<td>Nicholas Vlamis (U Michigan)</td>
<td>3866 East Hall</td>
</tr>
<tr>
<td>Wednesday, January 20, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- Nicholas Vlamis (U Michigan)</td>
<td>Nicholas Vlamis (U Michigan)</td>
<td>4088 East Hall</td>
</tr>
<tr>
<td>Wednesday, January 27, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- Richard Canary (UM)</td>
<td>Richard Canary (UM)</td>
<td>4088 East Hall</td>
</tr>
<tr>
<td>Wednesday, February 03, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- Richard Canary (U Michigan)</td>
<td>Richard Canary (U Michigan)</td>
<td>4088 East Hall</td>
</tr>
<tr>
<td>Wednesday, February 10, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- David Fisher (Indiana U)</td>
<td>David Fisher (Indiana U)</td>
<td>4088 East Hall</td>
</tr>
<tr>
<td>Wednesday, February 17, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- David Fisher (Indiana U)</td>
<td>David Fisher (Indiana U)</td>
<td>4088 East Hall</td>
</tr>
<tr>
<td>Wednesday, February 24, 2016</td>
<td>3:00pm-5:00pm</td>
<td>RTG Working Seminar on Geometry, Dynamics and Topology -- David Fisher (U Indiana)</td>
<td>David Fisher (U Indiana)</td>
<td>4088 East Hall</td>
</tr>
</tbody>
</table>

- **Uniformly hyperbolic arc graphs**
- **Big mapping class groups**
- **An introduction to Anosov representations**
- **TBA**
- **Coarse differentiation, quasi-isometries and solvable groups I**
- **Coarse differentiation, quasi-isometries and solvable groups II**
- **Coarse differentiation, quasi-isometries and solvable groups III**
Abstracts

RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, January 13, 2016, 3:00pm-5:00pm
3866 East Hall
Nicholas Vlamis (U Michigan)
Uniformly hyperbolic arc graphs

I will present the work of Hensel-Przytycki-Webb showing that the arc graph associated to a compact surface with nonempty boundary is 7-hyperbolic and the curve graph associated to a finite-type surface is 17-hyperbolic. As an application, I will also present the work Aramayona-Fossas-Parlier describing a connected infinite-diameter 7-hyperbolic arc graph for a large class of infinite-type surfaces.

RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, January 20, 2016, 3:00pm-5:00pm
4088 East Hall
Nicholas Vlamis (U Michigan)
Big mapping class groups

Continuing from last week, I will present the work of Aramayona-Fossas-Parlier describing a connected infinite-diameter 7-hyperbolic arc graph for a large class of infinite-type surfaces; however, the mapping class group of such a surface does not act acylindrically on this arc graph. A natural question is whether there exists a more suitable hyperbolic graph such that the mapping class group of an infinite-type surface acts acylindrically. I will present work of Bavard-Genvois answering this in the negative. Time permitting, I will discuss some properties and questions of the so-called big mapping class groups (i.e. mapping class groups of infinite-type surfaces).

RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, January 27, 2016, 3:00pm-5:00pm
4088 East Hall
Richard Canary (UM)
An introduction to Anosov representations

Anosov representations are higher rank analogues of convex cocompact representations into rank one Lie groups. Labourie introduced them in his study of the Hitchin component and they have since become an organizing principle in higher Teichmuller theory. We will give a gentle introduction to this theory.
RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, February 03, 2016, 3:00pm-5:00pm 
4088 East Hall
Richard Canary (U Michigan )
TBA

RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, February 10, 2016, 3:00pm-5:00pm 
4088 East Hall
David Fisher (Indiana U)
Coarse differentiation, quasi-isometries and solvable groups I

The classification of finitely generated groups up to quasi-isometry is a major problem in geometric group theory. Key difficulties arose in the area for studying quasi-isometries of solvable groups. The resolution of many of these difficulties comes from a notion of coarse differentiation. In general, quasi-isometries are not even continuous, let alone differentiable, but this notion allows one to analyze them as though they had derivatives. I will introduce the notion of coarse derivative and illustrate its application in the context of rigidity of solvable groups.

RTG Working Seminar on Geometry, Dynamics and Topology
Wednesday, February 17, 2016, 3:00pm-5:00pm 
4088 East Hall
David Fisher (Indiana U)
Coarse differentiation, quasi-isometries and solvable groups II

The classification of finitely generated groups up to quasi-isometry is a major problem in geometric group theory. Key difficulties arose in the area for studying quasi-isometries of solvable groups. The resolution of many of these difficulties comes from a notion of coarse differentiation. In general, quasi-isometries are not even continuous, let alone differentiable, but this notion allows one to analyze them as though they had derivatives. I will introduce the notion of coarse derivative and illustrate its application in the context of rigidity of solvable groups.
RTG Working Seminar on Geometry, Dynamics and Topology  
Wednesday, February 24, 2016, 3:00pm-5:00pm  
4088 East Hall  
David Fisher (U Indiana)  
*Coarse differentiation, quasi-isometries and solvable groups III*

The classification of finitely generated groups up to quasi-isometry is a major problem in geometric group theory. Key difficulties arose in the area for studying quasi-isometries of solvable groups. The resolution of many of these difficulties comes from a notion of coarse differentiation. In general, quasi-isometries are not even continuous, let alone differentiable, but this notion allows one to analyze them as though they had derivatives. I will introduce the notion of coarse derivative and illustrate it's application in the context of rigidity of solvable groups.