

## ***FELIX KLEIN SEMINAR***

**Speaker: Henrik Matthiesen**

**University of Chicago**

**Date:** Thursday, November 1, 2018

**Time:** 2:00 PM

**Location:** 258 Hurley Hall



***Lecture Title:***

**The systole of large genus minimal surfaces in positive Ricci curvature**

***Abstract***

If  $(M, g)$  is a closed 3-manifold with positive Ricci curvature, the space of closed, embedded minimal hypersurfaces with bounded topology is smoothly compact by the classical Choi—Schoen theorem. In contrast to this, we study properties of such surfaces, when the topology becomes more and more complex. Our main result is that the systole (or more generally any  $k$ -th homology systole) tends to zero along such a sequence. This is joint work with Anna Siffert.