1127-51-173   **Maxime Fortier Bourque***, Department of Mathematics, 40 St. George Street, Toronto, Ontario M5S 2E4, Canada. *Searching for convex sets in Teichmüller space.*

It is an open question of Howard Masur whether the convex hull of 3 points in Teichmüller space is always compact. Indeed, very few convex sets are known. For example, metric balls are not necessarily convex. In an attempt to explore Masur's question, I will discuss an algorithm for computing extremal length, Teichmüller distance, and geodesics in some low-dimensional Teichmüller spaces. (Received February 02, 2017)