



Speaker: Peter Buser, École Polytechnique Fédérale de Lausanne.

Title: Enumeration algorithms for simple curves.

Abstract: In joint work with Hugo Parlier we design algorithms for the enumeration and high precision graphical representation of simple closed geodesics on a hyperbolic surface. In the talk we present the algorithmic part of the enumeration where the emphasis is to avoid finding the same geodesic several times during the process. This is achieved by using certain embedded graphs. We also address the question of how to graphically represent the non closed simple geodesics.