

Séminaire d'algèbre, topologie et géométrie
Jeudi 12 octobre à 14h
Salle I

Thomas Mettler

Francfort

Extremal conformal structures on projective surfaces

Given a prescription of paths on a surface - one for every direction in each tangent space - one might ask if those paths are the geodesics of a Riemannian metric. Generically they are not, hence one might look for a Riemannian metric whose geodesics are 'as close as possible' to the prescribed paths. This gives rise to a natural variational problem. In this talk I will discuss how its critical points relate to certain weakly conformal maps and convex projective structures.