

Séminaire d'algèbre, topologie et géométrie
Jeudi 18 juin à 14h
Salle I

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Bending metal sheets, Riemann surfaces and integrable systems

When you bend a metal sheet, without stretching, it deforms through isometric immersions of a Riemannian metric. Problem : for which surfaces is the differential equation of isometric immersion an integrable system ? We find the first examples. We use ideas of Darboux relating complex geometry and integrable systems. Joint work with Jeanne Clelland, Tom Ivey and Peter Vassiliou.