

“Apart from topology, orangutans do not rush to accept another human definition, namely that of ‘tools’, as of ‘external detached objects (to exclude a branch used for climbing a tree) employed for reaching specific goals’.” —Misha Gromov

The Trivial Notions Seminar Proudly Announces

On Rigidity of Maps of Closed Riemann Surfaces

A talk by
Stergios Antonakoudis

Abstract

In 1913 de Franchis proved the following theorem : Let \tilde{X} be a closed Riemann surface of genus greater than 1, then a) Given another Riemann surfaces X of genus greater than 1, there are finitely many non-constant maps from \tilde{X} to X . b) There are only finitely many X for which there exists a non-constant map from \tilde{X} to X .

We will prove this theorem and give explicit bounds depending of the genus of \tilde{X} . In doing so we will bring out the role of the Jacobian variety and the associated theta functions as natural tools for the study of such maps.

Thursday October 21st, at 3:00 pm
Science Center 507