Stability of foliations

Stephane Geudens
University College London

`s.geudens@ucl.ac.uk`

Abstract

A foliation is a decomposition of a manifold into submanifolds that fit together nicely. Foliations arise naturally in various contexts (e.g. group actions, solutions to differential equations). I will discuss the stability problem for foliations, which aims to find conditions under which a given foliation only admits trivial deformations. I will review a classical stability result due to Hamilton, and explain joint work in progress with Florian Zeiser which potentially generalizes Hamilton's result.