Heidelberg-Karlsruhe-Strasbourg Geometrie-Tag

"Liouville current, intersection and pressure metric revisited"

Prof. Dr. Andrés Sambarino, Université Paris VI Pierre et Marie Curie

Freitag, 01.12.2017, 11.00 Uhr, SR C, INF 205

"Riemann surfaces and line complexes"

Firat Yasar, Université de Strasbourg

Freitag, 01.12.2017, 14.00 Uhr, SR B, INF 205

"Moduli spaces of non-negatively curved Riemannian metrics"

Prof. Dr. Wilderich Tuschmann, KIT, Karlsruhe

Freitag, 01.12.2017, 15.30 Uhr, SR B, INF 205

10. Heidelberg-Karlsruhe-Strasbourg Geometrie-Tag

"Liouville current, intersection and pressure metric revisited"

Prof. Dr. Andrés Sambarino, Université Paris VI Pierre et Marie Curie

The purpose of the talk is to explain a construction of a Liouville current for a representation in the Hitchin component. Bonahon's intersection between two such currents can be computed. We will also explain the relation with a pressure metric. This is joint work with D. Canary, M. Bridgeman and F. Labourie.

"Riemann surfaces and line complexes"

Firat Yasar, Université de Strasbourg

Firstly we will recall the uniformisation theorem and speak about how to uniformise multiply connected regions. The second part of this talk will include several graphs defined on Riemann surfaces. We plan to explain these graphs known as line complexes, Speiser trees and dessins d'enfants and the relation between them. At the end we will give several examples of them.

"Moduli spaces of non-negatively curved Riemannian metrics"

Prof. Dr. Wilderich Tuschmann, KIT, Karlsruhe

I will report on recent joint work with Michael Wiemeler. We study spaces and moduli spaces of Riemannian metrics with non-negative Ricci or non-negative sectional curvature on closed and open manifolds and construct, in particular, first and large classes of manifolds for which these spaces have non-trivial homotopy, homology and rational cohomology groups.