



ID de Contribution: 8

Type: Non spécifié

Moduli of spherical surfaces and their representation spaces

jeudi 5 juin 2025 16:00 (1 heure)

In this talk we discuss certain topological properties of the moduli space $\mathcal{MS}_{\sqrt{g,n}}(\vartheta)$ of spherical surfaces, namely surfaces of genus g endowed with a metric of curvature 1 with n conical singularities of angles $2\pi\vartheta_1, \dots, 2\pi\vartheta_n$, and highlight how different they are from moduli spaces of surfaces of curvature -1 . We show that their local structure can be studied through certain decorated representation spaces, which are also object of our investigation.

Concerning the global topological properties of $\mathcal{MS}_{\sqrt{g,n}}(\vartheta)$, we show that these moduli spaces are homotopy equivalent to finite cell complexes and that their connected components are non-compact (with very few exceptions). Time permitting, we will describe some explicit example.

This is joint work with Dmitri Panov (KCL).

Orateur: MONDELLO, Gabriele (Sapienza Università di Roma)