ID de Contribution: **17**   Type: **Non spécifié**

Exotic maximal surface group representations into $\mathrm{Diff}(\mathbb{S}^1)$

vendredi 27 juin 2025 11:30 (1 heure)

The Euler class of a surface group representation into $\mathrm{Diff}(\mathbb{S}^1)$ satisfies the Milnor—Wood inequality, and representations with maximal Euler class are semi-conjugated to Fuchsian representations by a theorem of Matsumoto. In higher regularity, Ghys proved a stronger rigidity theorem: for $k \geq 3$, a maximal circle action by diffeomorphisms of class C^k is C^k-conjugated to some Fuchsian action. In particular it is minimal, dilating, and Hölder conjugated to any Fuchsian action. I will explain that all these results fail in regularity C^1, by associating « exotic » maximal C^1 actions to discrete and faithful surface group representations into $\mathrm{PSL}(2, \mathbb{C})$. This is based on discussions with Selim Ghazouani and Françoise Dal'bo.

Orateur: THOLOZAN, Nicolas (ENS-PSL)