

Jérémy Toulisse

Curriculum Vitæ

Personnal informations

- Born on 28/02/1990 in Agen (France).
- Professional address: Département de Mathématiques, Université de Côte d'Azur.
- Email: jtoulisse@unice.fr
- URL: <https://math.unice.fr/~jtoulisse>

Employment and education

- 2019-2025 **Assistant Professor**, *University of Nice*.
- 2018-2019 **Postdoc**, *University of Nice*.
- 2015-2018 **Assistant professor (NTT)**, *University of Southern California*, Los Angeles.
- 2012-2015 **PhD in Mathematics**, *University of Luxembourg*, Luxembourg.
- 2007-2012 **MS in pure mathematics**, *University Paul Sabatier*, Toulouse.

Grants and prizes

- 2024-2029 **Junior member of the *Institut Universitaire de France***.
- 2024-2029 **Member of the ERC ANSur (PI: François Labourie)**.
- 2022-2023 **Member of the ANR Project GAPR (PI Andrea Seppi)**.

PhD

- Title *Minimal Lagrangian diffeomorphisms between hyperbolic cone surfaces and anti-de Sitter geometry*
- Director Jean-Marc Schlenker (Université du Luxembourg)
- Defense Juillet 2015

Publications and preprint

1. Brian Collier, Jérémy Toulisse, Richard Wentworth. *Higgs bundle, isomonodromic leaves and minimal surfaces* - arXiv:2512.07152
2. Michele Ancona, François Labourie, Anna Roig Sanchis, Jérémy Toulisse. *Minimal surfaces with negative curvature in large dimensional spheres* - arXiv:2510.18618
3. Andrea Seppi, Graham Smith, Jérémy Toulisse. *On complete maximal submanifolds in pseudo-hyperbolic space* - arxiv:2305.15103
4. Brian Collier, Jérémy Toulisse. *Holomorphic curves in the 6-pseudosphere and cyclic surfaces* - Accepted at *Transaction of the AMS*
5. François Labourie, Jérémy Toulisse. *Quasicircles and quasiperiodic surfaces in pseudo-hyperbolic*

spaces. Accepted at *Inventiones Mathematicae* (2023).

6. François Labourie, Jérémy Toulisse, and Michael Wolf. *Plateau problems for maximal surfaces in pseudo-hyperbolic spaces*. Accepted at *Annales Scientifiques de l'ENS* (2022).
7. Nicolas Tholozan, Jérémy Toulisse, *Compact connected components in relative character varieties of punctured spheres*. Accepted at *Épjournal de Géométrie Algébrique* (2021).
8. Jérémy Toulisse, *Higgs bundles, pseudo-hyperbolic geometry and maximal representations*. Actes du séminaire TSG, Tome 34 (2017).
9. Brian Collier, Nicolas Tholozan, Jérémy Toulisse, *The geometry of maximal representations of surface groups into $SO_0(2, n)$* . *Duke Math. J.*, 168(15):2873-2949, (2019).
10. Jérémy Toulisse, *Minimal diffeomorphisms between hyperbolic surfaces with cone singularities*. *Com. in Analysis ad Geometry*, Volume 27 (2019) Number 5.
11. Jérémy Toulisse, *Irreducible decomposition for local representations of quantum Teichmüller space*. *Pacific Journal of Mathematics*, 294(1): 233–256, (2018).
12. Jérémy Toulisse, *Maximal surfaces in anti-de Sitter manifolds with particles*, *Ann. Inst. Fourier*, no. 4, 1409–1449 (2016).
13. Juan Arias de Reyna et Jérémy Toulisse, *The n -th prime asymptotically*, *Journal de Théorie des Nombres de Bordeaux*, 25 (2013).

Supervision

PhD thesis

2021-2025 **Maximal surfaces with polygonal boundary in pseudo-hyperbolic space**, Alex Moriani.

2023-today **Volume of maximal representations into $SO(2, 3)$** , Timothe Lemistre.

2025-today **Convex cocompact representaitons into G_2** , Kewei Li.

Master thesis

2023-2024 **Mostow rigidity**, Sobhan Afzalimoghaddam.

2022-2023 **Holonomy groups in Riemannian geometry**, Pham Ngong.

2021-2022 **Quantum representations of mapping class group**, Olivier Bisson.

2020-2021 **Higgs bundles and higher Teichmüller spaces**, Mohamed Maiza.