Tom Ferragut

Postdoctorant

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▬▬▬ Research activity

Positions

01/23 – today	**Postdoctorat**, University of Fribourg. Working with **Enrico Le Donne**
07/22 – 10/22	**JSPS post-doc fellowship**, Kyoto University. Working with **Ryokichi Tanaka**

Ph.D (2018 – 2022)

Title	**Geometry of horospherical products**
Advisers	Jérémie Brieussel & Constantin Vernicos
Institution	Institut Montpelliérain Alexander Grothendieck (IMAG)

Internships

2018	**About the separation profiles of graphs**, University of Montpellier. Under the supervision of **Jérémie Brieussel**.
2016	**The Hurwitz existence problem for a given branched data**, University of Pisa. Under the supervision of **Carlo Petronio**.
2015	**Optimisation of a recommendation algorithm**, INRIA, Rennes. Under the supervision of **Anne-Marie Kermarrec**.

▬▬▬ Publications

2022	**Geometric rigidity of quasi-isometries in horospherical products**, *University of Montpellier*. (Preprint: arXiv:2211.04093)
2020	**Geodesics and Visual boundary of Horospherical Products**, *University of Montpellier*. (Preprint: arXiv:2009.04698)
2018	**Elementary solution of an infinite sequence of instances of the Hurwitz problem**, *With Carlo Petronio, University of Pisa*. Rendiconti Lincei Matematica E Applicazioni 29(2) : 297-307. (arXiv: 1805.00305)

Education

Diploma

2017 – 2018 **University of Montpellier**.
- Master degree in Fundamental Mathematics

2014 – 2018 **ENS Rennes**.
- Mathematics departement

2014 – 2017 **University of Rennes 1**.
- Master degree in Mathematics
- Bachelor degree in Mathematics

Talks

March 2023 **Graduate student Seminar**, *Université de Bern*.
What if the shortest path was not the straight line ?

March 2023 **Oberseminar Geometrie**, *Université de Fribourg*.
Geometry and rigidity of quasi-isometries of horospherical products.

February 2023 **Lightning Talk YGGT XI**, *University of Münster*.
Geometry and quasi-isometry rigidity of horospherical products.

February 2023 **Séminaire groupes et analyse**, *Université de Neuchâtel*.
Quasi-isometry classification of solvable Lie groups constructed as Carnot type horospherical products.

January 2023 **Geometric Group Seminar**, *University of Münster*.
Rigidity of quasi-isometries and geometry of horospherical products.

Decembre 2022 **Topics in Geometric Analysis II (Fall2022)**, *EPFL*.
Geometry and rigidity of quasi-isometries of horospherical products.

Decembre 2022 **Special Seminar**, *Université de Fribourg*.
Geometry and rigidity of quasi-isometries of horospherical products.

October 2022 **Differential Topology Seminar**, *Kyoto university, Kyoto*.
Geometry and quasi-isometry rigidity of horospherical products.

April 2022 **Geometry and Topology Seminar**, *Bowling Green University, Ohio*.
Sol type groups' quasi-isometries.

November 2021 **Rencontre des jeunes chercheuses et jeunes chercheurs du GDR Platon**, *CIRM, Marseille*.
Geodesics and Visual Boundary of Horospherical products.

January 2021 **Strukturtheorie Seminar**, *Institut für Diskrete Mathematik, Graz*.
"Geodesics and Visual Boundary of Horospherical products"

January 2021 **Séminaire Darboux**, *University of Montpellier*.
"Geodesics and Visual Boundary of Horospherical products"

March 2020 **Dynamics and Group Geometry Early Researchers Seminar (DAGGER)**, *University of Warwick*.
"Horospherical products of Gromov hyperbolic spaces"

March 2020 **Bristol Junior Geometry Seminar (BRIJGES)**, *University of Bristol*.
"Horospherical products of Gromov hyperbolic spaces"

March 2020	**Junior Topology and Group Theory Seminar**, *University of Oxford*. "Horospherical products of Gromov hyperbolic spaces"
February 2020	**Journée des doctorant.e.s**, *University of Montpellier*. "What if the shortest path wasn't a straight line ?"

Responsibilities and Teaching experiences

2019 – 2020	Organiser of the Ph.D students seminars of the University of Montpellier.
2022	Tutorials (60h) - Arithmetic (Year 1)
2021	Tutorials (20h) - Arithmetic (Year 2)
2019 – 2021	Tutorials (108h) - Mathematics for Biology (Year 1)
2021	Tutorials (25h) - Linear Algebra (Year 1)
2020	Tutorials (32h) - Linear Algebra (Year 2)
2019	Tutorials (21h) - Statistics for Biology (Year 2)
2019	Tutorials (21h) - Mathematics for Chemistry (Year 1)
2019	CESPROMA project (32h) - Mathematics support courses for first year students (Year 1)
2018	Tutorials (32h) - Linear Algebra and Group Theory (Year 3)

Languages

French	Native language
English	Advanced