# Tom Ferragut

IUT de Vannes 8 Rue Michel de Montaigne 56000 Vannes⊠ tom.ferragut [at] univ-ubs.ch



### **Positions**

10/23 - **Teaching assistant (PRAG)**, IUT de Vannes.

today

11/22 - **Postdoc**, University of Fribourg.

09/23 Working with Enrico Le Donne

07/22 - **JSPS post-doc fellowship**, Kyoto University.

10/22 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)

_	- 1						
ь.	$\boldsymbol{\alpha}$		$\sim$	Э.	ti	$\sim$	n
_	u	u	L	a	LI	U	ш

#### 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 Lightning Talk YGGT XI, University of Münster.
    - 2023 Geometry and quasi-isometry rigidity of horospherical products.
  - February **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 Topics in Geometric Analysis II (Fall2022), EPFL.
    - 2022 Geometry and rigidity of quasi-isometries of horospherical products.
  - Decembre **Special Seminar**, *Université de Fribourg*.
    - 2022 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 Rencontre des jeunes chercheuses et jeunes chercheurs du GDR Platon,
    - 2021 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 **Journée des doctorant.e.s**, *University of Montpellier*.
    - 2020 "What if the shortest path wasn't a straight line?"

# Responsibilities and Teaching experiences

- 2024 2025 Director of Studies
- 2019 2020 Organiser of the Ph.D students seminars of the University of Montpellier.
- 2023 2025 384h/year on mathematics and computer science
  - 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