

Maylis Limouzineau

Born on June 18, 1985, French

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Doctor in mathematics

Research interests : contact geometry, knot theory, Morse techniques.

Current situation

One-year employment for teaching and research Université Paris 6 (UPMC).

Formation

- 2012–2016 **PhD in mathematics** UPMC, lab. : Institut de mathématiques de Jussieu-Paris-rive-gauche (IMJ-PRG), *advisor : Emmanuel Ferrand, co-advisor : Christian Blanchet.*
Title : « Constructions of Legendrian submanifolds in the space of one-jets and generating functions » , defended on October 21, 2016.
- 2012 **Master of mathematics** Université Paris 7, *Algebraic Topology, Knot Theory.*
Master thesis : « Constructions of 3-manifolds by surgery and double branched covers.»
- 2006 **Bachelor of mathematics** Université Bordeaux 1.

Papers

- Nov. 2016 **Operations on Legendrian submanifolds.** <https://arxiv.org/pdf/1611.06823.pdf>

Research Activities

- since 2014 **ANR project COSPIN** *Spectral invariants in contact geometry.* Members : B. Chantraine, E. Ferrand, R. Leclercq, M. Mazzucchelli, S. Sandon, A. Vaugon.

Other activities

- Public outreach** Nov. 2016 **Talk for undergraduate students at UPMC** « *Solving the Chinese ring puzzle is not a waste of time!* »
Since 2013 **Events of scientific popularization** Fête de la science et Salon jeux et culture mathématiques, Paris. *Stand realisation, animation.*
- Management** 2013–2015 *for PhD students of the IMJ-PRG.*
- Seminar** 2014–2015 *co-organisation of the "Séminaire des Lapins" the weekly informal seminar of PhD students of the IMJ-PRG.*

Languages

French : native language

English : fluent

Japanese, Spanish and Italian : notions

Talks

- Jan. 2017 **Symplectix Seminar** Paris, France. « *Constructions of Legendrian cobordisms with generating functions : concordance and homotopy.* »
- Sep. 2016 **Topology and Geometry Seminar** Nantes, France. « *Constructions around Legendrian knots and Legendrian cobordisms via generating functions.* »
- Feb. 2016 **Meeting ANR COSPIN** Montréal, Canada. « *Operations on Legendrians and generating functions.* »
- Feb. 2016 **Topology Seminar** Grenoble, France. « *Sum, convolution, and Legendre transform for Legendrian submanifolds.* »
- Dec. 2015 **Meeting ANR COSPIN** Bruxelles, Belgium « *Operations on generating functions and min-max selector.* »
- Jun. 2015 **Conference for Christian Leruste** Paris, France. « *Looking for the Legendrian Borromean rings 2.* »
- Mar. 2015 **Topology and Geometry Seminar** Toulouse, France. « *Various constructions for Legendrian submanifolds with respect to generating functions.* »
- Jan. 2015 **Winter school, La Llagonne** Pyrénées, France. « *Incompressible surfaces and actions on trees.* »
- Nov. 2014 **Gaston Darboux Seminar** Montpellier, France. « *Elementary operations on apparent contours and generating functions.* »
- Jun. 2014 **Informal Phd Seminar** Paris, France. « *Categorification : from the Jones polynomial to Khovanov homology.* »
- Mar. 2014 **Official PhD Seminar of IMJ-PRG** Paris, France. « *Looking for the Legendrian Borromean rings 1.* »
- Nov. 2013 **Topology** Paris, France. « *Cobordisms of Legendrian knots and generating functions quadratic at infinity.* »
- Feb. 2013 **Informal Phd Seminar** Paris, France. « *Introduction to Morse theory.* »

Teaching experience

- 2016 – 2017 **TD (exercise sessions)** *Analyse and Algebra, 1st year math undergraduate students.*
TD *Arithmetic, 2nd year maths-info undergraduate students.*
Colles (oral sessions) *Mathematics, "classe préparatoire" , lycée J. Decour.*
- 2015 – 2016 **TD** *Quadratic forms, affine isometries and Hermitians spaces, 2nd year math undergraduate students.*
TD *Topology and differential calculus, 3rd year math undergraduate students.*
- 2013 – 2014 **Complements and tutoring** *Multivariable calculus, 2nd year math undergraduate students.*
Colles *Algebra and geometry, 2nd year math undergraduate students.*
Course and TD *General linear Algebra, 2nd year undergraduate students, re-orientation towards maths.*
- 2012 – 2013 **TD** *Linear Algebra : calcul vectoriel, 1st year physic undergraduate students.*
TD *Analyse, 1st year math undergraduate students.*

Personal interests

- Arts **Drawing, watercolour** *poster and various illustrations. Formation for illustration and narration, 2016–2017.*
Singing *Member of the chorale of Sophie Germain, University Paris 7.*
- Sports **Biking, Dancing.**