

# Octave Curmi

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*Curriculum vitae*  
*December 2019*

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## Info

Contact **octave.curmi@univ-amu.fr**.

**Born October 21, 1992.**

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## Education

Oct 2015 – **PhD student in mathematics**, "*Topology of the Milnor fibers of nonisolated surface singularities*", with Patrick Popescu-Pampu, Université Lille, France.

June 2019

Jury composed of :

— **Javier Fernández de Bobadilla**, Referee.

— **Hussein Mourtada**.

— **Anne Pichon**, Referee.

— **Martin Saralegui Aranguren**.

— **Bernard Teissier**.

2014 – 2015 **Master in pure mathematics**, Université de Lille.

2014 **"Agrégré de mathématiques"** (Title obtained by competition, entitling to a teacher position in the national education system).

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## Experience

### Preprints

Oct 2019 **Topology of smoothings of non-isolated singularities of complex surfaces**, 43 pages, Available at <https://arxiv.org/pdf/1910.04145.pdf>.

Nov 2019 **Boundary of the Milnor fiber of a Newton non degenerate surface singularity**, 33 pages, Available at <https://arxiv.org/pdf/1911.13258.pdf>.

### Positions

Sep 2018 – **ATER (temporary research and teaching position)**, Université Aix-Marseille, France.

Aug 2020

### Talks given

Nov 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, Workshop on Topological and Analytical methods in singularity theory, Guanajuato, Mexico.

July 2019 **"Singularities in Topology"**, Wide audience talk for students and teachers, Lebanese International University, Beyrouth, Lebanon.

- July 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Singularity theory session of the conference "Joint meeting France-Brazil in Mathematics"*, IMPA, Rio, Brazil.
- July 2019 **Short course around Mumford's "The topology of normal singularities of an algebraic surface and a criterion for simplicity" (1961)**, Galatasaray University, Istanbul, Turkey.
- June 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Weekly seminar of topology, geometry and algebra*, Université de Nantes, France.
- May 2019 **Short course "Around Milnor's fibration theorem : an interplay of algebra and topology"**, *1st Najah short courses in mathematics*, An-Najah University, Nablus, Palestine.
- May 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Weekly seminar of singularities*, Université Paris Diderot, France.
- Apr 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Weekly seminar of algebraic geometry*, Université de Lille, France.
- Apr 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Weekly seminar Singacom*, Universidad de Valladolid, Spain.
- Mar 2019 **"Topology of non-isolated singularities of complex surfaces"**, *Weekly seminar of dynamical systems and geometry*, Université d'Angers, France.
- Feb 2019 **Some bases of toric geometry, I & II**, *Weekly workshop on singularities*, Université d'Aix-Marseille, France.
- Nov 2018 **"Topology of non-isolated singularities of complex surfaces"**, *Weekly seminar of complex geometry*, Université d'Aix-Marseille, France.
- Oct 2018 **"Topology of non-isolated singularities of complex surfaces"**, *Workshop "Lipschitz Geometry of Singularities"*, Casa Matemática Oaxaca, Oaxaca, Mexico.
- The following talks were given during the seminar "GEOMETRY OF SINGULAR SPACES" at Université de Lille.**
- Nov 2017 **"About Klein's formula for plane curves"**.
- Nov 2017 **"Plücker's formulae for plane curves"**.
- Apr 2017 **"Nonisolated surface singularities studied à la Némethi-Szilard"**.
- Jan 2017 **"Topology of non-degenerate normalized surface singularities"**.
- June 2016 **"Topology of isolated non-degenerate surfaces singularities, following Oka"**.
- Feb 2016 **"Integral points in polygons and genus of curves in the torus"**.

#### [Attended conferences](#)

- Jul 2019 **"Joint meeting France-Brazil in Mathematics"**, IMPA, Rio, Brazil.
- May 2019 **"Geometry and Topology of Singularities"**, Alfréd Rényi Institute of Mathematics, Budapest, Hungary.
- Oct 2018 **Workshop "Lipschitz Geometry of Singularities"**, Casa Matemática Oaxaca, Oaxaca, Mexico.

- June 2018 **International school on Singularities and Lipschitz Geometry**, Unidad Cuernavaca del Instituto de Matemáticas, UNAM, Mexico.
- Dec 2017 **Theory of Valuations**, Université Paris 7.
- July 2017 **Galois Meets Newton : Algebraic and Geometric aspects of Singularity Theory**, *Conference in honor of A. Khovanskii*, Weizmann Institute of Science, Israel.
- Feb 2017 **A panorama on singular varieties**, *Conference in honor of Lê Dũng Tráng*, Institute of Mathematics of the University of Sevilla IMUS, Spain.
- Nov 2016 **The 4th Franco-Japanese-Vietnamese Singularities**, Université Savoie-Mont Blanc, Chambéry, France.
- Oct 2016 **Resolution of foliations**, Université Paris 7, France.
- May 2016 **Nonisolated singularities**, Université de Lille, France.
- May 2016 **Algebra, geometry and topology of singularities**, *One week of school and one week of conferences*, Galatasaray University, Istanbul, Turkey.
- Feb 2016 **Winter Braids VI**, *School on braids and low dimensional topology*, Université de Lille, France.

#### Participation to research networks

- 2019 **Involved in the project “Jets, arcs and invariants of surface singularities”**, along with M. Tosun (Galatasaray university, Turkey), C. Plénat (Aix-Marseille university, France), H. Mourtada (Université Paris-Diderot, France), M. Ruggiero (Université Paris-Diderot, France) and B. Karadeniz (Galatasaray university, Turkey), French-Turkish research project, implying a stay in Istanbul in July 2019.

#### Teaching

- 2019 – 2020 **Teaching basic calculus and algebra to 1st and 2nd year students**, 176 hours, Université Aix-Marseille, Marseille, France.
- 2018 – 2019 **Teaching basic analysis and algebra to 1st and 2nd year students**, 192 hours, Ecole Polytech Marseille, Marseille, France.
- 2015 – 2018 **Assistant teacher in Télécom engineer school for 1st and 2nd year students**, 64 hours of teaching per year, Université de Lille.
- 2014–2015 **Oral examiner for weekly exams of bachelor students**, Lycée Saint Paul, Lille.
- 2011 – 2016 **Teacher for private lessons**, in various contexts, as a volunteer or not.

#### Computer skills

- Programming CAML, C++  
Software L<sup>A</sup>T<sub>E</sub>X, OpenOffice, Linux, Maple, IPE, Sage

#### Languages

- French Mother tongue  
English Fluent

Arabic, Spanish  
German

*Basic, currently learning*  
*Basic words and phrases*