Octave Curmi

Curriculum vitae

Info

Contact   **octave.curmi@univ-amu.fr**.
Born October 21, 1992.

Education

Oct 2015 – June 2019   **PhD student in mathematics**, *"Topology of the Milnor fibers of nonisolated surface singularities", with Patrick Popescu-Pampu*, Université Lille, France.
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   **Agrégé de mathématiques**.

Experience

Publications

Topology of smoothings of non-isolated singularities of complex surfaces, published in Math. Ann. 377, 1711–1755 (2020), available at https ://arxiv.org/pdf/1910.04145.pdf.

Boundary of the Milnor fiber of a Newton non-degenerate surface singularity, *Published in Adv. Math. 372 (2020), Article ID 107281, 31 pages*, Available at `https://arxiv.org/pdf/1911.13258.pdf`.

Preprints

Aug 2020   **A proof of A. Gabrielov's rank theorem**, *61 pages*, with A. Belotto da Silva and G. Rond, Available at `https://arxiv.org/pdf/2008.13130.pdf`.

Positions

Sept 2020 –   **Postdoc at the Alfréd Rényi institute of Mathematics**, *Budapest, Hungary*.

Sep 2018 – Aug 2020   **ATER (temporary research and teaching position)**, *Université Aix-Marseille, France*.

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 an 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, France.

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	LaTeX, OpenOffice, Linux, Maple, IPE, Sage

Languages

French	*Mothertongue*
English	*Fluent*
Hungarian	*Currently learning*
Spanish	*Intermediate*
Arabic, German	*Basic words and phrases*