Octave Curmi

Curriculum vitae
April 2021

Info

Contact	**curmi@renyi.hu**.
	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*.

Research talks

Talks in conference on invitation

Nov. 2020 **"A new proof of Gabrielov's rank Theorem"**, *GDR singularities and applications, online conference.*

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

Jul 2019 **"Topology of smoothings of non-isolated singularities of complex surfaces"**, *Singularity session of the conference "Joint meeting France-Brazil in Mathematics", IMPA, Rio, Brazil.*

Oct 2018 **"Topology of non-isolated singularities of complex surfaces"**, *Workshop "Lipschitz Geometry of Singularities"*, Casa Matemática Oaxaca, Oaxaca, Mexico.

Shortcourses and workgroups

Feb 2021- **I organize the workgroup "around toric geometry and topology of singularities" at the institute Alfréd Rényi of Budapest, which consists in a series of talks aiming at offering a good understanding of the algorithm that I propose in the toric case.**, Alfréd Rényi Institute, Budapest, Hungary.

Jul 2019 **Shortcourse around Mumford's article "The topology of normal singularities of an algebraic surface and a criterion for simplicity"**, Galatasaray University, Istanbul, Turkey.

May 2019 **Shortcourse "Around Milnor's fibration theorem : an interplay of algebra and topology"**, *1st Najah short courses in mathematics*, An-Najah University, Naplouse, Palestine.

Feb 2019 **Basics of toric geometry, I & II**, *Singularity workgroup*, Université d'Aix-Marseille, France.

Exposés en séminaires

Mar 2021 **"Boundary of the Milnor fiber of a Newton non-degenerate non-isolated singularity of surface"**, *Singularity Webinar d'Aix-Marseille.*

Mar 2021 **"A proof of Gabrielov's rank Theorem"**, *Iberoamerican webinar of Young researchers in Singularity Theory.*

Feb. 2021 **"A proof of Gabrielov's rank Theorem"**, *Séminaire de Géométrie Analytique*, Université de Rennes, France.

Dec. 2020 **"A proof of Gabrielov's rank Theorem"**, *Séminaire commun Géométrie Algébrique - Angers, Géométrie, Topologie, Algèbre - Nantes, France.*

Oct. 2020 **"A proof of Gabrielov's rank Theorem"**, *Algebra and Geometry seminar*, UNAM, Cuernavaca, Mexico.

June 2019 **"Topologie des lissages de singularités non-isolées de surfaces complexes"**, *Séminaire hebdomadaire de topologie, géométrie et algèbre*, Université de Nantes, France.

May 2019 **"Topologie des lissages de singularités non-isolées de surfaces complexes"**, *Séminaire hebdomadaire de singularités*, Université Paris Diderot, France.

Apr 2019	**"Topologie des lissages de singularités non-isolées de surfaces complexes"**, *Séminaire hebdomadaire de géométrie algébrique*, 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	**"Topologie des lissages de singularités non-isolées de surfaces complexes"**, *Séminaire hebdomadaire de systèmes dynamiques et géométrie*, Université d'Angers, France.
Nov 2018	**"Topologie des lissages de singularités non-isolées de surfaces complexes"**, *Séminaire hebdomadaire de géométrie complexe*, Université d'Aix-Marseille, France.
	The following talks were given in the seminar "géométrie des espaces singuliers" in Lille University, France.
Nov 2017	***"Autour de la formule de Klein pour les courbes planes"***.
Nov 2017	***"Les formules de Plücker pour les courbes planes"***.
Avr 2017	***"Les singularités non-isolées de surfaces étudiées à la Némethi-Szilard"***.
Jan 2017	***"Topologie des singularités non-dégénérées normalisées de surfaces"***.
Juin 2016	***"Topologie des singularités isolées non-dégénérées de surfaces, d'après Oka"***.
Fév 2016	***"Points entiers dans les polygones et genre des courbes dans le tore"***.

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

2021	**Part of the project "Local Properties of Subanalytic Sets", with A. Belotto da Silva and G. Rond from Aix-MArseille Université, France**, *Funded by the program "international emerging actions" of CNRS*.
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