Xavier Roulleau

Xavier.Roulleau@univ-amu.fr

Work Address:
Institut de Mathématiques de Marseille,
UMR 7373 du CNRS,
39, rue F. Joliot Curie,
13453 Marseille Cedex 13

Citizenship	*French.*
Curent Position	**Sep. 2016 − Now,** *Full professor (PR2), Aix-Marseille University, France*
Past Experience	**Sep. 2012 − Aug. 2016,** *Maître de conférences (Assistant Professor), University of Poitiers, France*
	Sep. 2011 − Aug. 2012, *Postdoctoral Research Fellow at the Instituto Superior Tecnico of Lisbon (Portugal).*
	Sept. 2010 − Aug. 2011, *Postdoctoral Research Fellow at the University of Strasbourg (France)*
	Nov. 2008 − Aug. 2010, *Postdoctoral Research Fellow (JSPS) at the University of Tokyo (Japan)*
	Feb. 2008 − Sept. 2008, *Postdoctoral Research Fellow at the Max-Planck Institute of Bonn (Germany).*
Diploma and Titles	**Habilitation à Diriger des Recherches,** *Defended on November 20, 2015 in Poitiers University (France).*
	Ph.D., 2007: *Thesis title : "L'application cotangente des surfaces de type general".* *Defended on November 16, 2007 at the University of Angers (France).*
Professional activities	*Since 2020, vice–Director of the Institut Archimède (former labex) of mathematics and informatics in Aix-Marseille University.*
	Member of the Scientific Counsel of the Institute of Mathematics of Marseille
	Consultative member of the Advisory Board of the Institute of Mathematics of Marseille
	Co-organiser of the Complex Geometry seminar in Marseille
	Responsable of the organisation of the Master II for the year 2019-2020 on the theme "Algebraic Geometry and Arithmetic".
	Co-organiser of the Thematic Month "Complex Geometry" in CIRM (Luminy) during February 2019. One week Master Class followed by 4 weeks of conferences on : *Week 1. Singular Metrics in Khlerian Complex Geometry* *Week 2. Birational Geometry and Hodge Theory* *Week 3. Entire Curves, Rational Curves and Foliations* *Week 4. Ball Quotient Surfaces and Lattices*
Research Interests	**Algebraic geometry:** *Ball quotient surfaces, Quaternionic Shimura surfaces, K3 surfaces, Surfaces of general type, Positivity, Irregular Surfaces, Surfaces with $p_g = 0$, bounded negativity, cubic threefolds.*

Selected Recent Published Papers

1. *Construction of Nikulin configurations on some Kummer surfaces and applications, With A. Sarti, Math. Ann. 373 (2019), no. 1-2, 597–623.*

2. *On generalized Kummer surfaces and the orbifold Bogomolov-Miyaoka-Yau inequality Trans. Amer. Math. Soc. 371 (2019), no. 11, 7651–7668.*

3. *A pair of rigid surfaces with $p_g = q = 2$ and $K^2 = 8$ whose universal cover is not the bidisk Avec F. Polizzi et C. Rito, to appear in IMRN*

4. *On explicit Schoen surfaces with Carlos Rito and Alessandra Sarti, Algebraic Geometry 6 (4) 2019, 410–426*

5. *Curves with low Harbourne constants on Abelian and Kummer surfaces,*
   Rend. Circ. Mat. Palermo. *(2) 67 (2018), no. 3, 481–491.*

6. *Chern slopes of simply connected complex surfaces of general type are dense in [2,3]*
   with Giancarlo Urzua, Annals of Mathematics, 182 (2015), 287-306

7. *On Schoen Surfaces*
   with C. Ciliberto and M. Mendes Lopes, Comm. Math. Helvetici, 90 (2015), no. 1, 59–74

8. *Canonical surfaces with big cotangent bundle*
   with E. Rousseau. Duke Math. J. 163 (2014), no. 7, 1337–1351

9. *Negative curves on algebraic surfaces*
   with Th. Bauer, B. Harbourne, A. L. Knutsen, A. Küronya, S. Müller-Stach, T. Szemberg. Duke Math. Journal 162 (2013), 1877–1894.

Recent research stays	***Porto university*** *two one month stays, March and July 2019, work with Carlos Rito* ***Poitiers university*** *one week, June 2019, work with A. Sarti* ***Lille university*** *two weeks, March and May 2018, work with D. Markouschevitch*
Invitations of researchers	***Carlos Rito*** *one week in January 2020 and one week in December 2017* ***Vincent Koziarz*** *One week, January 2019* ***Alessandra Sarti*** *4 days, October 2018* ***Vincent Koziarz*** *One week, October 2017* ***Francesco Polizzi*** *One week, May 2017* ***Ciro Ciliberto*** *One week, February 2017*
Recent International Conferences as invited speaker	***Xiamen University, China, September 2018*** *Algebraic Surfaces and Related Topics* ***Cetraro, Italy, September 2018*** *Differential, Algebraic and Topological Methods in Complex Algebraic Geometry* ***St Petersbourg, Russia, May 2018*** *Automorphic Forms and Algebraic Geometry* ***Cracow, Poland, April 2018*** *Modern and Classical Aspects on Algebraic Surfaces* ***CIRM, Luminy, December 2017*** *Algebraic Geometry and Complex Geometry* ***Banff, Canada, March 2017*** *New Trends in Arithmetic and Geometry of Algebraic Surfaces*
Recent talks in Seminars	**Porto** *March 2019* **Rennes** *January 2019* **Lille** *June 2018* **Angers** *Mars 2018* **Berlin** *February 2018* **Montpellier** *November 2017* **Strasbourg** *October 2017*
Technical Skills	*Programing in MAPLE and MAGMA, basics of SAGE.*