

Martin de Borbon

Postdoctoral researcher at King's College London
Strand Building, S4.30, Strand, London, WC2R 2LS
martin.deborbon@kcl.ac.uk • +44 7742 757717

Education

- **PhD** **Imperial College London**
Supervised by Simon Donaldson 2011-2015
Funded by the European Research Council Date of award: 1 March 2016
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Employment

- **Postdoc** **King's College London**
Funded by the EPSRC 2020-2022
 - **Postdoc** **Université de Nantes**
Funded by the Agence Nationale de la Recherche 2019-2020
 - **Postdoc** **Aarhus University**
Funded by the Aarhus University Research Foundation 2017-2019
 - **Assistant Professor** **Universidad Nacional de San Luis**
2015-2017
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Visiting positions

- **IMPA, Rio de Janeiro, Brazil** Jan-Feb. 2017
 - **SCGP, Stony Brook, United States** Nov-Dec. 2015
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Articles and Preprints

- *Parabolic bundles and spherical metrics* **Proceedings of the AMS**
(Joint with D. Panov) accepted in 2022
- *Polyhedral Kähler cone metrics on \mathbb{C}^n singular at hyperplane arrangements* arXiv preprint
(Joint with D. Panov) 2021
- *Calabi-Yau metrics with cone singularities along intersecting complex lines: the unstable case* **Journal of the London Mathematical Society**
(Joint with G. Edwards) published in 2021
- *Calabi-Yau metrics with conical singularities along line arrangements* **Journal of Differential Geometry**
(Joint with C. Spotti) accepted in 2021
- *Toric Sasaki-Einstein metrics with conical singularities* **Selecta Mathematica**
(Joint with E. Legendre) accepted in 2022
- *Schauder estimates on products of cones* **Comentarii Mathematici Helvetici**
(Joint with G. Edwards) published in 2020
- *ALE Calabi-Yau metrics with conical singularities along a compact divisor* **IMRN**
(Joint with C. Spotti) published in 2019
- *Local models for conical Kähler-Einstein metrics* **Proceedings of the AMS**
(Joint with C. Spotti) published in 2018
- *Asymptotically conical Ricci-Flat Kähler metrics on \mathbb{C}^2 with cone singularities along a complex curve* **Journal of the London Mathematical Society**
published in 2017
- *The Gibbons-Hawking ansatz over a wedge* **Journal of Geometry and Physics**
published in 2017

- *Kähler metrics with cone singularities along a divisor of bounded Ricci curvature*
- *Singularities of plane complex curves and limits of Kähler metrics with cone singularities. I: Tangent Cones*

Annals of Global Analysis and Geometry
published in 2017

Complex Manifolds
published in 2017

Selected talks

- USTC Geometry & Topology Seminar, 2 online talks, March 2022
- KCL Geometry Seminar, London, March, 2022
- Shanghai Maths Seminar, online talk, July 2020
- Séminaire d'Analyse et Géométrie, IMJ-PRG, Paris, November 2019
- The 3rd Symposium in Geometry and Differential Equations, USTC, Hefei, China, May 2019
- Séminaire de Géométrie Complexe, Institut de Mathématiques de Toulouse, May 2019
- Séminaire d'Analyse et Géométrie, Ecole Normale Supérieure, Paris, October 2018
- QGM Nielsen retreat, Sandbjerg Estate, Denmark, October 2018
- Informal Geometry Workshop in Paradiso, Italy, January 2018
- QGM Seminar, Aarhus University, Denmark, October 2017
- Holomorphic Foliations Seminar, IMPA, Rio de Janeiro, Brazil, January 2017
- CAPDE Seminar, Catholic University, Chile, October 2016
- Annual meeting of the Argentinian Mathematical Society, Bahia Blanca, Argentina, September 2016
- EGEO, Workshop on Differential Geometry, Cordoba, Argentina, August 2016
- Simons Center for Geometry and Physics, Stony Brook, USA, November 2015
- Geometric Analysis Seminar at the University of Warwick, United Kingdom, January 2015

Teaching experience

- *King's College London, United Kingdom* 2021-2022
 - Metric Spaces & Topology 226 (covering a paternity leave) Undergraduate
 - Tutorials for Geometric Topology 327 Master
- *Aarhus University, Denmark* 2017-2019
 - Tutorials on Calculus and Linear Algebra Undergraduate
 - Riemannian Geometry Master
 - Riemann Surfaces (covering a leave) Master
 - Kähler Geometry PhD
- *Universidad Nacional de San Luis, Argentina* 2015-2017
 - Numerical Sequences and Series Undergraduate
 - Representations of Finite Groups Undergraduate
 - Real Analysis Undergraduate
 - Partial Differential Equations Undergraduate
 - Algebraic Geometry Undergraduate
- *Universidad Nacional de Cuyo, Argentina* 2015-2017
 - Differential Geometry Undergraduate

- Measure Theory Undergraduate
 - IMPA, Brazil Jan-Feb 2010
 - Tutorials for Vector Calculus Master
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Service

- Supervisor of Dylan Prod'homme-Bennett's MSci thesis: "*Hodge Theory*", King's College London 2021-2022
- Co-supervisor of Jorge Bravo's master thesis: "*On Calabi-Yau conifolds*", Aarhus University 2018-2019
- Co-organizer of the QGM seminar, Aarhus University 2017-2019
- Referee reports
Communications in Pure and Applied Mathematics
Forum of Mathematics, Sigma
Selecta Mathematica
- Reviewer for MathSciNet