

Nicolas MARQUE

PERSONAL DATA

FULL NAME: Nicolas Rémi MARQUE
PLACE AND DATE OF BIRTH: Toulouse, France le 22 Mars 1993
NATIONALITY: Française
PHONE NUMBER: +336 68 94 58 80
EMAIL ADDRESS: nicolas.marque@uni-potsdam.de
PERSONAL PAGE: <https://nicolasmarque.netlify.app/>

PROFESSIONAL SITUATION

POSTDOCTORATE | *Wissenschaftlicher Mitarbeiter* in POTSDAM UNIVERSITÄT. Postdoctorate supervisor: Jan Metzger

PROFESSIONAL EXPERIENCE:

ACADEMIC POSITIONS

APR 2020-TODAY | *Wissenschaftlicher Mitarbeiter* in POTSDAM UNIVERSITÄT.
SEPT 2019-MAR 2020 | Teaching assistant in UNIVERSITÉ PARIS DIDEROT.
SEPT 2016-DEC 2019 | Ph.D. under the supervision of Paul Laurain: *Moduli spaces of Willmore immersions*, teaching for the Bachelor. Financing through CDSN.
MAR 2016-JUL 2016 | Internship in UNIVERSITÉ DE PARIS, Master's thesis: *Sur les phénomènes de concentration des surfaces de Willmore*

INVITATIONS AND RESEARCH STAYS

FEB 2020 | Invitation in Melbourne by *Yann Bernard*
JUN-JUL 2019 | Recipient of CAPES-COFEUCB, research stay in Fortaleza on invitation of *Jorge Lira*. Collaboration with *Jorge Lira* and *Rodrigo Avalós*
MAY 2018-SEPT 2020 | Participant to ANR BLADE : <http://anr-blade.blogspot.com/p/publications.html>
MAY 2018 | *Oberwolfach Seminar: Spectral estimates on Noncompact Manifolds, applications to Geometry*, Oberwolfach.

FORMATION

SEPT 2016-DEC 2019 | PhD in UNIVERSITÉ PARIS DIDEROT
DEC 9 2019 | PhD defense: *docteur de l'Université de Paris*
Jul 2015 | Agrégation de mathématiques, option B : calcul scientifique
Competitive French exam of mathematics. Final place (nationwide): 8th
SEPT 2012- SEPT 2016 | University studies (bachelor and master) as a *normalien* in ENS LYON

TEACHINGS:

IN POTSDAM UNIVERSITY

APR 2022-JUL 2022	Analysis IV Tutoriums fourth semester
NOV 2021-FEB 2022	Analysis III Tutoriums third semester
APR-JUL 2021	Lecture: Mean curvature problems in euclidean space PDE Master's course
NOV 2020-FEB 2021	Analysis I Tutoriums first semester
NOV 2020-FEB 2021	PDE I Tutoriums for a Master's course
APR 2020-JUL 2020	PDE II Tutoriums for a Master's course

IN PARIS UNIVERSITY

SEPT 2019-OCT 2019	Lectures and Tutoriums MRM1 Mathematics and Logic for the first semester
JAN 2018-MAY 2018	<i>Colles</i> MM4 Oral examinations for the second semester
SEPT-DEC 2017, 2018, JAN-APR 2020	Tutoriums Integration Integration and measure theory for the fifth semester
JAN 2017-MAY 2017	Tutoriums in MM2 Analysis for the first semester
SEPT 2016-DEC 2016, SEPT 2018-DEC 2018	Tutoriums in RM1 Logic for the first semester

MATHEMATIC DIFFUSION

OCT 2016-2019	Participation to the <i>Fête de la Science</i> Animation of the event, in school and in the university https://www.fetedelascience.fr/
DEC 2019	Interns supervision in Paris University
NOV 17-19, MAR 18-19	Participation to the <i>rencontres master-doctorants</i> Talks and discussions to entice M2 students to start a research career.

SCIENTIFIC ACTIVITIES

EDITORIAL ACTIVITIES

- | | | |
|-----------|--|--|
| 2021-2022 | | Webmaster for the PDE team of the Mathematik Institut of Potsdam |
| 2019-2022 | | Reviewer for MATHEMATISCHE ZEITSCHRIFT and ADVANCES IN MATHEMATICS |

EVENTS ORGANIZATION

- | | | |
|--------------------|--|---|
| OCT 2021-JUL 2022 | | Co-organization of the seminar <i>Geometric Analysis, Differential Geometry and Relativity</i>
Joint Seminar with Tübingen University in a semi-remote format, https://www.math.uni-potsdam.de/professuren/partielle-differentialgleichungen/topics-in-geometric-analysis . |
| APR 2021-JUL 2021 | | Organization of a team PDE seminar |
| APR 2020-JUL 2020 | | Co-organization of <i>Bourbakonfs</i>
Virtual PhD students seminar |
| NOV 2019 | | Co-organization of the <i>rencontres master-doctorants</i>
Talks and discussions to entice M2 students to start a research career. |
| SEPT 2018-APR 2020 | | Co-organization of the <i>Bourbakettes</i>
PhD students seminar |

ADMINISTRATIVE RESPONSABILITIES

- | | | |
|----------|--|---|
| NOV 2021 | | Organization of the auditions for a professor of Stochastics in POTSDAM UNIVERSITY |
| DEC 2018 | | Participation to the ANR day
Presentation of the ANR <i>BLADE</i> project, https://anr.fr/Project-ANR-18-CE40-0023 . |

INTERNATIONAL CONFERENCES

- | | | |
|----------|--|--|
| FEB 2021 | | Speaker for the <i>1st Geometric Analysis Festival</i> (talk available online)
<i>Willmore energy, Willmore immersions, Willmore bubbling</i> |
| FEB 2021 | | Speaker for the <i>International Meeting on Lorentzian Geometry</i> (talk available online)
<i>Conformal Gauss map and applications</i> |
| JUL 2019 | | Speaker for the <i>1st Joint Meeting Brazil-France in Mathematics</i> , Rio de Janeiro
<i>An exploration of Willmore bubbling</i> |

SÉMINARS

MAR 2022 | Geometry Tours, Nantes, PDE Lyon

JAN 2022 | PDE Nancy

NOV 2021 | Geometry Potsdam

FEB 2020 | Geometry Melbourne

OCT 2019 | Géométrie Potsdam

SEPT 2019 | Géométrie Nancy, Bruxelles, Paris

JUN 2019 | Géométrie Fortaleza

LANGUES

CASTELLANO: C1

DEUTSCH: B1

ENGLISH: C2

FRANÇAIS: Natif

NIHON : Débutant

LANGAGES INFORMATIQUES

MAPLE, SCILAB : Mastery; formal, scientific computations, animations

LATEX : Mastery

CAML : Good knowledge

PUBLICATIONS LIST

PUBLICATIONS IN PEERED REVIEWED JOURNALS

- APR 2020 | *Minimal Bubbling for Willmore Surfaces*. International Mathematics Research Notices (2020). <https://doi.org/10.1093/imrn/rnaa079>
- APR 2019 | *An ε -regularity result with mean curvature control for Willmore immersions and application to minimal bubbling*, arXiv:1904.015215, accepted by Annales de l'Institut Fourier (Jan 2021)
- FEB 2020 | *Conformal Gauss Map Geometry and Application to Willmore Surfaces in Model Spaces*. Potential Anal (2020). <https://doi.org/10.1007/s11118-020-09825-9>

PREPRINTS

- APR 2022 | *Rigidity Theorems for Asymptotically Euclidean Q -singular Spaces*, collaboration with R. Avalos and P. Laurain
- JAN 2022 | *Einstein-type systems on complete manifolds*, collaboration with R. Avalos and J. Lira
- FEB 2021 | *Energy in Fourth Order Gravity*, arXiv:2102.00545, collaboration with R. Avalos and J. Lira
- SEPT 2020 | *Energy Estimates for the Tracefree Curvature of Willmore Surfaces and Applications*, arXiv:2009.10180, collaboration with Y. Bernard and P. Laurain

RESEARCH MEMOIRS

- AUG 2021 | *Mean curvature problems in euclidean space* (M2 lecture notes)
- DEC 2019 | *Moduli spaces of Willmore immersions* (PhD)
- AUG 2016 | *Sur les phénomènes de concentration des surfaces de Willmore* (Master's thesis)