

RENAUD DETCHERRY

PERSONAL INFORMATION

Date of birth November 10, 1989 in Suresnes, France
Mail detacherry at math.msu.edu
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RESEARCH INTERESTS

Quantum topology · TQFTs · Volume conjecture · Semi-classical analysis ·
Mapping class group

WORK EXPERIENCE

Visiting assistant professor (postdoc) at MICHIGAN STATE UNIVERSITY

August 2015-May 2018 Research in mathematics and teaching 2 to 1 courses per semester.

EDUCATION

2012-2015 *PhD of Mathematics at UNIVERSITY PARIS VI*
Thesis: *Asymptotics of curve operators in TQFT*
Description: This thesis studied the asymptotic behavior of some quantum invariants (curve operators) coming from Reshetikhin-Turaev TQFTs and applications in relation to Witten's asymptotic expansion conjecture.
Advisor: Julien MARCHÉ

Studied at ECOLE NORMALE SUPÉRIEURE DE PARIS

2008-2012 I obtained a Master in fundamental Mathematics from UNIVERSITÉ PARIS VII in 2011, and a Bachelor of Physics from the ECOLE NORMALE SUPÉRIEURE DE PARIS in 2009

Prep school to Grandes Ecoles section MPSI/MP.*

2006-2008 Admitted to ECOLE NORMALE SUPÉRIEURE DE PARIS (section MP, rank: 2nd)

PUBLICATIONS AND PRE-PUBLICATIONS

*Published or
accepted papers*

- *Asymptotic formulae for curve operators in TQFT, Geometry and Topology*, Vol 20 (2016), no. 6, 3057-3096
- *Geometric quantization and asymptotics of pairings in TQFT*, To appear in **Annales Scientifiques de l'Ecole Normale Supérieure**

Preprints

- *Turaev-Viro invariants, colored Jones polynomials and volume*, with Effie Kalfagianni and Tian Yang, arXiv:1701.07818
- *Gromov norm and Turaev-Viro invariants*, with Effie Kalfagianni, arXiv:1705.09964

RECENT TALKS AND CONFERENCES

Seminars

(08.2017) Geometry-Topology seminar at UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles
(06.2017) Topology seminar at UNIVERSITY TOULOUSE 3 PAUL SABATIER, Toulouse

(06.2017) Topology seminar at UNIVERSITY PARIS VII
 (01.2017) Geometry-Topology seminar at GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta
 (05.2016) Topology seminar at STANFORD UNIVERSITY, Palo Alto
 (02.2016) Topology seminar at UNIVERSITY OF MONTPELLIER III
 (05.2015) Topology seminar at UNIVERSITY OF GENEVA
 (02.2015) Geometry and dynamical systems seminar at UNIVERSITY OF DIJON
 (02.2015) Topology seminar at the FOURIER INSTITUTE- UNIVERSITY OF GRENOBLE

Conferences

(09.2017) AMS sectional meeting at UNIVERSITY OF NEW YORK AT BUFFALO
 (07.2017) Summer school "Mapping class group and their representations" at UNIVERSITÉ PARIS VI
 (06.2017) Geometry and Topology day at ECOLE NORMALE SUPÉRIEURE DE LYON
 (05.2017) Conference "Quantum topology and geometry in Toulouse" at UNIVERSITY TOULOUSE 3 PAUL SABATIER, Toulouse
 (11.2016) Conference "Mapping-class group and low dimensional topology" at UNIVERSITY OF VIRGINIA, Charlottesville, USA
 (07.2016) Conference "Knots in Hellas" at the INTERNATIONAL OLYMPIC ACADEMY, Ancient Olympia, Greece
 (03.2016) Conference "Advances in Quantum and Low-Dimensional Topology" at the UNIVERSITY OF IOWA, Iowa City
 (02.2016) Conference "Winterbraids VI" at the UNIVERSITY OF LILLE I
 (07.2015) Conference at the CENTER FOR QUANTUM GEOMETRY OF MODULI SPACES IN AARHUS on "New advances in TQFT"
 (06.2015) Conference at OBERWOLFACH MATHEMATISCHES FORSCHUNGINSTITUT in Oberwolfach on "New Perspectives on the Interplay between Discrete Groups in Low-Dimensional Topology and Arithmetic Lattices"

OTHER INFORMATIONS

Languages

ENGLISH · Fluent
 FRENCH · Native speaker
 GERMAN · Level B2

Other interests

Running · Drawing · Writing · Biking · Salsa