

SARAH DIJOLS

Email :sarah.dijols@hotmail.fr
phone number :+33 625647908

Web page : <https://sarahdijols.github.io/>

CURRENT POSITION

From January 2022 to June 2022 Postdoctoral researcher at UBC

From September 2021 to December 2021 Postdoctoral researcher at MPIM, Bonn

From December 2018 to July 2021 Postdoctoral researcher at Yau Center, Tsinghua University, Beijing. Mentor : Bin Xu.

EDUCATION

From September 2014 to July 2018 PhD Thesis at the University of Aix-Marseille, under the supervision of Volker Heiermann.

2013-2014

Second year of Master, Fundamental Mathematics, Algebra and Geometry, UPMC, with honours

Master Thesis title : « L functions and Theta series » under the supervision of Jens Funke and Nicolas Bergeron.

2011-2013

Master Economics and Public Policy, PhD track, Sciences Po Paris and Ecole Polytechnique
Master Thesis title : « Prices' dynamics : could covariances highlight the financialization of commodities? » under the supervision of Nicolas Coeurdacier. First year Master in Fundamental Mathematics, Strasbourg University and UPMC

2010-2011

Second year of Magistere in Mathematics, Strasbourg University

2009-2010

Visiting student at the University of British Columbia, Vancouver, Canada
Bachelor at Sciences Po Paris

Bachelor in Mathematics, Pierre et Marie Curie University with highest honours

2007-2009

Double degree Sciences Po Paris and Pierre et Marie Curie University

PUBLICATIONS

Articles

Symplectic models for unitary groups, 34p, with Dipendra Prasad, *Trans. Amer. Math. Soc.*, December 2018.

The generalized injectivity conjecture, 2019, 95p, accepted at *Bulletin de la SMF* (2022).

The completed L -function for modular forms on G_2 , with Fatma Cicek, Giuliana Davidoff, Trajan Hammonds, Aaron Pollack, Manami Roy, 25p, April 2021, accepted at *Math. Zeit.*

Pre-prints :

Projection of root systems, 2019, in revision.

Parabolically induced representations of G_2/SO_4 I, February 2022,

Work in progress :

Local newforms for $SO(2n+1)$, with Didier Lesesvre

Parabolically induced representations of G_2/SO_4 II

TEACHING

Level	Courses	In charge
L3	Fourier Analysis for engineers ($2 \times 27h$, 36h)	Clothilde Mélot/Christophe Gomez
L3	Integration (36h)	Guillaume Rond
L3	Algebra and Geometry (10h, 36h)	Volker Heiermann/David Kohel
L2	Statistical tools for environmental sciences (28h)	Franck Torre
L1	Linear Algebra, Maths/info majors (24h)	Battesti Françoise
L1	Analysis, Maths/info majors (20h)	Battesti Françoise
L1	Linear Algebra for social scientists (in charge of the course) (30h)	Sarah Dijols
L1	Linear Algebra (54h) , Tsinghua University	Yang Yilong
L1	Tutorials in Algebra and Analysis (48h) , UPMC	Programme <i>Cap en Fac</i>
L1	Integral calculus with applications to physics, Math 101, UBC	Sarah Dijols

TALKS

Induced representations of p-adic G_2 distinguished by SO_4 , Poitiers and Caen Number Theory Seminars, December 2021

Induced representations of p-adic G_2 distinguished by SO_4 , Jeunes chercheurs et jeunes chercheuses en théorie des nombres (JC2A), Paris, August 2021

Induced representations of p-adic G_2 distinguished by SO_4 , UEA Pure Maths Seminar, and MPIM Number theory seminar, June and September 2021.

Extensions of p-adic groups, Tsinghua, Working Seminar, June 2021.

The completed L function for G_2 , Zhejiang University, Symposium Number Theory, May 2021.

Representations of G_2 distinguished by SO_4 , Voganish Seminar, August 2020.

I regularly attend and have given few talks in the Voganish Seminar, with Calgary, Beijing, and Poitiers. Two talks at the Voganish Project meeting group at BIRS, Banff, Summer 2019.

Two talks on Kottwitz, Harmonic Analysis on Reductive p-adic Groups and Lie Algebras (Spring seminar, Beida, Beijing) ; three talks on the introduction to endoscopy (autumn seminar at Beida Beijing)

The Generalized Injectivity conjecture, presented at Max Planck Institute and Gottingen, June 2018 ; at University of Calgary, Tsinghua University (Winter 2018), Bangalore ICTS (March 2019), and ICTP, Trieste.

Symplectic Models for unitary groups, Varanasi, December 2016
 Seminar Algebra and Geometry, Versailles, May 2017
 Seminar Poitiers, May 2017
 Workshop on Representation Theory of Reductive Groups Over Local Fields, Weizmann Institute of Science, June 2017
 Formule des traces relative appliquée à la démonstration d'un résultat de Waldspurger, Seminar RGR, I2M Marseille
 Working group on the Trace formula, organized by Farrell Brumley at Jussieu :
 Décembre 2015, Le côté spectral de la Formule des Traces pour GL_2
 Mars 2016, Formule des traces relative et un résultat de Waldspurger

PhD students seminars :

Introduction à la théorie des représentations de groupes réductifs : représentations distinguées et modèles :
 Grenoble, février 2017
 Paris 7, mai 2017

CONFERENCES AND WORKSHOPS ATTENDED, VISITS

BIRS, Basic Functions, Orbital Integrals, and Beyond Endoscopy, November 2021
 École d'été du groupement des jeunes chercheurs et jeunes chercheuses en théorie des nombres (JC2A), August 2021
 CIRM, online, Relative aspects in the Langlands Program, May 2021
 Zhejiang University, Symposium Number Theory, May 2021
 Paul Sally, MidWest Representation Theory, Online Conference, October 2020
 RNT Online Workshop, October 2020
 (Online) Conference on Representation Theory and Algebraic Analysis, May 2020
 Algebraic and Analytic aspects of Automorphic forms , ICTS Bangalore, March 2019
 On the Langlands Program : Endoscopy and Beyond, Singapore, December to January 2019
 Women in Automorphic forms, Darmstadt, September 2018
 Workshop on Representation Theory of Reductive Groups Over Local Fields, Weizmann Institute of Science, June 2017
 Class field theory course, IISER Trivandrum, December 2017
 Varanasi, TIMC AMS conference, December 2017
 Relative Trace Formula, Periods, L-Functions and Harmonic Analysis, CIRM, May 2016
 Summer School on Reductive Groups, Franken-Akademie Schloß Schney, Summer 2015
 Automorphic forms, Shimura varieties, Galois representations and L-functions Workshop, December 2014, MSRI, Berkeley
Academic visits
 Calgary University, September-November 2018
 Max Planck Institute, Bonn, May-June 2018
 Tata Institute of Fundamental Research, 15th of December-15th of January 2017

Current seminar and working groups attended

Pacific Automorphic Project Research Seminar

Voganish Seminar, Canadian Automorphic research group, Calgary-Pékin-Poitiers-Vancouver

ADDITIONAL ACTIVITIES

Popularization

Hippocampe program Spring 2015 (a one week introduction to mathematical research for High School students) ; participation in Piday Mucem in 2015 and « Fête de la Science » ; Maths games with High School students at CIRM library.

Participation in the PEPS-Egalité program (correspondance de Langlands) organized by Anne-Marie Aubert in April 2015. Poster presentation for a public of High School students.

Instructor in the workshop Math C2+ organized by the Polytechnique School to encourage High School female students from Aix-Marseille area to enroll in Sciences Studies.

Service

PhD students representative at the AMU Mathematics-Computer Science Doctoral School, 2015-2018.

EXTRACURRICULAR

Languages

French : Mother tongue

English : Fluent

Spanish : Moderate

Mandarin : Learning (HSK3-4)

IT Skills (to be refreshed)

Intermediate : Stata, R, GNU PLOT, OpenOffice, Excel, SageMath

Advanced : \LaTeX , PYTHON

Personal interests

Sports : Climbing, Mountaineering and Running

Mathematics, Ecology, Literature, Duduk

I have been a member of the Association Genepi which militates for « opening up » prisons. I was organizing cultural workshops for prisoners twice a month from January 2016 to June 2017. I left this association at the Autumn 2018.