DAMIEN SIMON

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129 Rue de Paris ⋄ 91400, Orsay

EDUCATION

University Paris-Sud/Paris-Saclay, Orsay *2018 - present*
- PhD student, Laboratoire de Mathématiques d'Orsay
Thesis: *Vertex algebras of chiral differential operators on a reductive group and representation theory.*
Advisor: Anne Moreau.
- M2 Arithmétique, Analyse, Géométrie (Supported by a Sophie Germain scholarship)
Master's thesis: *The geometric Satake equivalence.*
Advisors: Gérard Laumon and Anne Moreau.
- Préparation à l'agrégation de Mathématiques
French recruiting competitive examination for high school and undergrad teachers, ranked: 15/327.
Thesis : *How to use finite fields for problems concerning infinite fields.*
Advisor: Gérard Laumon.
- M1 Program Jacques Hadamard (Supported by a Sophie Germain scholarship)
Thesis: *La représentation de Weil.*
Advisor: Gérard Laumon.
- L3 Mathématiques fondamentales et appliquées
Thesis: *Le théorème de Hasse-Minkowsky.*
Advisor: Pierre Lorenzon.

Lycée du Parc, Lyon *2016-2018*
- MPSI,MP*

TALKS

2025
University of Erlangen: *Representation theory of the vertex algebra of chiral differential operators on a reductive group.*
University of Lille – Algebraic geometry, integrable systems and automorphic forms: *Chiral differential operators on a reductive group and representation theory.*
Inter-University center, Dubrovnik, Croatia – Representation theory XIX: *Representation theory of the vertex algebra of chiral differential operators on a reductive group.*
University of Roma Tor Vergata – ARTS seminar: *Chiral differential operators on a reductive group and representation theory.*
Institut des Hautes Etudes Scientifiques (IHES) – Rencontres MathTech: *When is a problem solved ?.*
2024
Laboratoire de Mathématiques d'Orsay – D-modules learning seminar: *D-modules, integrable connections and coherence.*
Laboratoire de Mathématiques d'Orsay – D-modules learning seminar: *The sheaf of differential operators.*
Laboratoire de Mathématiques d'Orsay – PhD students day: *Quantum geometric Langlands program in the language of vertex algebras.*
Laboratoire de Mathématiques d'Orsay – Good moduli spaces and GIT learning seminar: *Stable vector bundles over projective curves.*
2023
Insitut Henry Poincaré (IHP) – RéGA: *Classifying reductive algebraic groups.*
Laboratoire de Mathématiques d'Orsay – P=W conjecture learning seminar: *Springer theory.*

INVITATIONS

Research stay at the University of Erlangen, invited by Thomas Creutzig, 05 July 2025 – 17 July 2025.
Research stay at the Sapienza University of Rome, invited by Alberto De Sole, 17 February 2025 – 28 February 2025.

TEACHING

University Paris-Saclay: *Algèbre 2, L3 Mathématiques fondamentales et appliquées*, 2023-2025.
Exercise sessions on the theory of modules over a commutative ring and its application to linear algebra.
University Paris-Saclay: *Calcul formel, L3 Mathématiques fondamentales et appliquées*, 2023-2024.
An introductory class to the use of SageMath with applications to cryptography.
University Paris-Saclay: *Analyse et topologie, L2 Mathématiques et Physique*, 2023.
Exercise sessions for a course of basic functional analysis.

LANGUAGES

French (native), English (fluent), Spanish (beginner).