

CURRICULUM VITAE

Sophie MOREL

Contact information

Name	Sophie Morel
Date of birth	12.16.1979
Place of birth	Issy les Moulineaux, Hauts de Seine, France
Country of citizenship	France
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Education

1999-2003	École Normale Supérieure.
2002-2005	Graduate student at the Université Paris-Sud. Advisor : Gérard Laumon.

Diplomas

1997	Baccalauréat général (end of secondary education).
2000	Licence (third year of university) and maîtrise (fourth year of university) in mathematics. Title of the maîtrise project : Correspondance de Langlands locale. Scientific advisor : Anne-Marie Aubert.

- 2001 DEA "Méthodes algébriques" (fifth year of university) at the Université Paris 6.
 Title of the DEA project : Termes locaux dans la formule des points fixes de Lefschetz, after an article by M. Goresky and R. MacPherson.
 Advisor : Gérard Laumon.
- December PhD thesis at the Université Paris-Sud.
 2005 Title : Complexes d'intersection des compactifications de Baily-Borel. Le cas des groupes unitaires sur \mathbb{Q} .
 Advisor : Gérard Laumon.

Past positions

Teaching assistant at the Université Paris-Sud (September 2002- August 2005).

Member of the Institute for Advanced Study in Princeton, New Jersey (September 2006-August 2009).

Visitor at the Harvard University Mathematics Department (August 2009-December 2009).

Present position

Professor at the Harvard University Mathematics Department (since December 2009), Research Fellow of the Clay Mathematics Institute (since October 2006) and Member of the Institute for Advanced Study in Princeton, New Jersey (since September 2010).

Publications and prepublications

- *Complexes d'intersection des compactifications de Baily-Borel. Le cas des groupes unitaires sur \mathbb{Q}* , PhD thesis, Université Paris-Sud (2005).
- *Complexes pondérés sur les compactifications de Baily-Borel. Le cas des variétés de Siegel*, J. Amer. Math. Soc. 21 (2008), p 23-61.
- *Note sur les polynômes de Kazhdan-Lusztig* (to appear in Mathematische Zeitschrift).
- *On the cohomology of certain non-compact Shimura varieties*, Annals of Mathematics Studies 173, Princeton University Press (2010).
- *Cohomologie d'intersection des variétés modulaires de Siegel, suite* (submitted).

- *The intersection complex as a weight truncation and an application to Shimura varieties*, Proceedings of the International Congress of Mathematicians, Hyderabad, India (2010).