

# Curriculum vitae

## Angela Ortega Ortega

Birthday and place of birth: September 6th 1975, Monterrey, N.L., Mexico.

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## Education

**2000-2003** Ph.D in Mathematics. University of Nice Sophia–Antipolis (UNSA), Nice, France (September 15th 2003).

**1999-2000** D.E.A. (Diplôme d'Études Approfondies) in Mathematics. University of Paris XI, Orsay, France (September 20th 2000 ).

**1996-1999** Master in Mathematics. Research Center in Mathematics (CIMAT), Guanajuato, Gto., Mexico (January 28th 1999).

**1992-1996** Bachelor of Sciences (Mathematics). University of Nuevo León (UANL), San Nicolás de los Garza, N.L.. (July 1996).

## Thesis

*“Sur l'espace des modules des fibrés vectoriels de rang 3 sur une courbe de genre 2 et la cubique de Coble”*, PH.D dissertation under the supervision of Profesor Arnaud Beauville, September 15th 2003 (mention Very Honourable).

*“Sur la quartique de Coble et l'espace  $SU_2(C)$ ”*, D.E.A. dissertation under the supervision of Profesor Arnaud Beauville, September 20th 2000.

## Awards and grants

- National Council of Science and Technology (CONACyT), research grant 61011 (2007-2010)
- Professorship Improvement Program (PROMEP), fellowship and research grant (2007-2008).

- Member of the National System of Researchers (SNI) since January 2006, register number 34377.
- Centro de Investigación en Matemáticas, acknowledgement to the best average grade (promotion 96-98).

## Publications and Pre-prints

- *Variétés de Prym associées aux revêtements  $n$ -cycliques d'une courbe hyperelliptique*, Mathematische Zeitschrift **245** (2003), 97–103
- *On the moduli space of rank 3 vector bundles on a genus 2 curve and the Coble cubic*. J. Algebraic Geom. **14** (2005), 327–356
- *Prym–Tyurin varieties coming from correspondences with fixed points*, Journal of Algebra **311** (2007), 268–281
- *Brill-Noether bundles and coherent systems on special curves* (joint work with L. Brambila-Paz) Proceedings of the Conference "Vector Bundles on Algebraic Curves 2006"
- *Estabilidad de sistemas coherentes* (joint work with L. Brambila-Paz) Aportaciones de la Sociedad Mexicana
- *Prym varieties of cyclic coverings* (joint work with H. Lange) to appear in Geometria Dedicata
- *Tensor product of coherent systems* (joint work with L. Brambila-Paz) Pre-print
- *Prym varieties of triple coverings* (joint work with H. Lange) Pre-print

## Academic Positions

From **April 2009** Mitarbeiterin, Institut für Mathematik, Humboldt Universität zu Berlin.

**2008-2009** Mitarbeiterin, Fachbereich Mathematik, Universität Duisburg-Essen, Essen.

**2006-2007** Titular Professor in the Institute of Physics and Mathematics of University of Michoacán.

**2004-2006** Postdoc fellowship in the Institute of Mathematics of UNAM (Campus Morelia).

**2003-2004** Attaché Temporaire à l'Enseignement et la Recherche (ATER) in the Mathematics Department J.-A. Dieudonné, University of Nice.

## Teaching

- Fall 2009 Exercise session (Übungen) of Linear Algebra II.
- Spring 2009, Exercise session (Übungen) of Linear Algebra II.
- Fall 2008, Exercise session (Übungen) of Algebraic geometry (graduate course), Duisburg-Essen Universitt.
- Fall 2007, *Algebraic Geometry* graduate course, *Linear Algebra II*, Universidad Michoacana.
- Spring 2007, *Real Analysis* (graduate course) and *Linear Algebra*, Universidad Michoacana.
- Fall 2006, *Commutative Algebra* (graduate course), Universidad Nacional Autónoma de México.
- Spring 2006, *Algebraic Geometry* (graduate course), Universidad Nacional Autónoma de México.
- Spring 2005, *Introduction to Algebraic Geometry*, Universidad Michoacana.
- Spring 2004, assistant of the course *Algebra I*, Université de Nice.
- Fall 2003, assistant of the course *Mathematics, Science of Life*, Université de Nice.
- Spring 2002, assistant of the course *Mathematics, Science of Life*, Université de Nice.
- Spring 1999, assistant of the course *Algebraic Topology* (graduate course), Centro de Investigación en Matemáticas.
- Fall 1998, assistant of the course *Algebra*, Universidad de Guanajuato.
- 1997-1998, assistant of the courses *Linear Algebra I* and *Linear Algebra II*, Centro de Investigación en Matemáticas.

## Talks and mini-courses

- Nov 2009, *Prym varieties of non-cyclic triple coverings*, North German Algebraic Geometry Seminar, Berlin.
- May 2009, *Moduli spaces of coherent systems*, Romanian-German Symposium on Mathematics and Its Applications Sibiu (Hermannstadt), Romania.
- November 2008, *Existence results on moduli spaces of coherent systems*, Oberseminar University of Duisburg-Essen.

- February 2008, *On the moduli space of rank 3 bundles on a genus 2 curve*, Algebraic Geometry Seminar, Universität Humboldt.
- January 2008, *Dolgachev's conjecture on the moduli space of rank 3 bundles on a genus 2 curve*, Algebraic Geometry Seminar, Universität Erlangen-Nürnberg.
- November 2007, *P vs NP : a one million dollars problem*, Interdisciplinary Seminar, Faculty of Mathematics, Universidad Michoacana.
- November 2007, *Complexity: 'easy to find or easy to check?'*, Student Seminar Instituto de Matemáticas, UNAM, campus Morelia.
- October 2007, *Vector bundles on algebraic curves and theta functions*, invited speaker, XL Congress of the Mexican Mathematical Society, Universidad Autónoma de Nuevo León.
- August 2007, *Elliptic curves and Cryptography*, mini-course, VIII School on Algebraic Geometry, Universidad de Guanajuato.
- June 2007, *Elliptic curves and applications*, VIII Summer School, Instituto de Matemáticas, UNAM, campus Morelia.
- May 2007, *Coherent systems over special curves*, invited speaker, Joint Meeting AMS-SMM, Universidad de Zacatecas.
- April 2007, *Elliptic curves and applications*, Colloquium, Faculty of Mathematics, Universidad de Zacatecas.
- February 2007, *Moduli space of vector bundles of rank 3 and the Coble cubic*, Vector Bundles Seminar, Tufts University, Boston.
- February 2007, *Dolgachev's conjecture on the moduli space of rank 3 bundles on a genus 2 curve*, Seminar, Texas A & M University.
- February 2007, *Dolgachev's conjecture on the moduli space of rank 3 bundles on a genus 2 curve*, Algebraic Geometry Seminar, University of Texas in Austin.
- January 2007, *Theta map and Coble hypersurfaces*, Algebraic Geometry Seminar, IMPA, Rio de Janeiro.
- December 2006, *Moduli space of vector bundles of rank 3 over a curve of genus 2 and the Coble cubic*, Conference on Vector Bundles, CIMAT, Guanajuato.
- August 2006, *Geometría proyectiva*, workshop, VII Summer School, Instituto de Matemáticas, UNAM.
- January 2006, *Elliptic curves and Cryptography*, mini-course, Second School on Geometry and Dynamics, Universidad Juárez Autónoma de Tabasco.
- November 2005, *The Nullstellensatz*, First School on Algebraic Geometry in Zacatecas, Universidad de Zacatecas.

- August 2005, *Prym–Tyurin Varieties*, Conference on Vector Bundles, University of Liverpool.
- May 2005, *Introduction to the vector bundles*, mini-curso, VII School on Algebraic Geometry, CIMAT, Guanajuato.
- October 2004, *Descomposition of certain Prym varieties in product of Jacobians*, Colloquium, Instituto de Matemáticas, UNAM.
- February 2004, *On the moduli space of rank 3 bundles on a genus 2 curve*, Algebraic Geometry Seminar, CIMAT, Guanajuato
- December 2003, *On the moduli space of rank 3 bundles on a genus 2 curve and the Coble cubic*, Complexe Algebraic Geometry 2003, CIRM, Luminy.
- May 2002, *Prym varieties associated to  $n$ -cyclic coverings of a hyperelliptic curve*, Seminar, Laboratorio J.-A. Dieudonné, UNSA, Nice.
- April 1996, *Applications of the  $G$ -sets*, Universidad Autónoma de Nuevo León.
- October 1994, *The plane crystallographic groups*, Colloquium SCIENTIA, Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM).

## Languages

English, French, German, Spanish.

Berlin, February 24th 2010.