

## Laura P. Schaposnik M. (July 4, 2013)

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PERSONAL INFORMATION	Mathematical Institute, University of Heidelberg, Im Neumheimer 388, Heidelberg, Germany	Born: 20 July, 1985 Nationality: Argentinian Phone: +44 75885 09147 Email: <a href="mailto:lauraschaposnik@gmail.com">lauraschaposnik@gmail.com</a> <a href="http://www.mathi.uni-heidelberg.de/~schaposnik">http://www.mathi.uni-heidelberg.de/~schaposnik</a>
EMPLOYMENT	<b>J. L. Doob Research Assistant Professor</b> , UIUC, University of Illinois at Urbana Champaign, USA.	2013-2016
	<b>Wissenschaftlicher Assistent</b> , Heidelberg University, Heidelberg, Germany	2012-2013
	<b>Stipendiary Lecturer in Mathematics</b> , Trinity College, Oxford, UK.	2012
	<b>Stipendiary Lecturer in Mathematics</b> , Magdalen College, Oxford, UK.	2011-2012
	<b>Retained Lecturer in Mathematics</b> , Hertford College, Oxford, UK.	2010-2011
EDUCATION	<b>University of Oxford</b> . New College, Oxford, UK. D.Phil. in Mathematics. Advisor: Prof. Nigel Hitchin. Thesis title: <i>Spectral data for G-Higgs bundles</i> .	2008-2013
	<b>National University of La Plata</b> . La Plata, Argentina. Licenciado en Matematica (MMath equivalent). Grade: 10/ 10. Master's Thesis: <i>A symplectic approach to constrained mechanical systems</i> . Advisor: Prof. Jorge Solomin.	2004-2008
	<b>Conservatory Gilardo Gilardi</b> . Music Conservatory, La Plata, Argentina. First degree in Music (Piano).	2003-2007
AWARDS, PRIZES AND GRANTS	<b>Short visit Grant</b> , European Science Foundation, Interactions of Low-Dimensional Topology and Geometry with Mathematical Physics Host: Nigel Hitchin, Mathematical Institute, University of Oxford, UK.	May-June 2013
	<b>Winner of Springer's Mathematics of Planet Earth Photo Contest</b> .	April 2013
	<b>QGM 6 months research grant</b> , Centre for Quantum Geometry of Moduli Spaces & University of Oxford.	April-September 2012
	<b>Short visit Grant</b> , European Science Foundation, Interactions of Low-Dimensional Topology and Geometry with Mathematical Physics Host: Ignasi Mundet Riera, CRM, Barcelona, Spain.	May 2012
	<b>Trimestre Grant</b> , Institut Henri Poincaré, CNRS, UPMC Geometry and analysis of surface group representations	January-March 2012
	<b>New College Cultural Award</b> , New College, Oxford.	January and June 2011
	<b>New College Research Grant</b> , New College, Oxford.	2009-2011
	<b>Clarendon Scholar</b> , Clarendon Council, Oxford.	2008-2011
	<b>Graduate Scholar</b> , New College, Oxford.	2008-2011

<b><i>Joaquín V González Prize,</i></b>	2009
Universidad Nacional de La Plata. Argentina.	
<b><i>National Government Prize</i></b>	2009
Awards to the best undergraduate student of the year. Argentina.	
<b><i>Santander Bank Prize.</i></b>	2009
Prize to the best undergraduate student of the year. Argentina.	
<b><i>Mathematical Argentinian Olympiads (XXIII,XXII,XXI Competencias Ernesto Paenza)</i></b>	
Bronze medal for the 3rd place of Argentina, together with Ramiro Lafuente	2007-08
<b><i>Two month Summer Scholarship,</i></b> IMPA, Rio de Janeiro, Brasil.	2006-08

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PUBLICATIONS  
AND PREPRINTS

<i>Higgs bundles and 3-manifolds.</i> with D. Baraglia. <i>In progress</i>	2013
<i>Nonabelianization of Higgs bundles.</i> arXiv: 1307.0960 with N. Hitchin.	2013
<i>Higgs bundles and (A, B, A)-branes.</i> ArXiv:1305.4638 with D. Baraglia.	2013
<i>Spectral data for G-Higgs bundles.</i> ArXiv:1301.1981 DPhil Thesis, University of Oxford, 170 p.	2013
<i>The Hitchin fibration for split real forms.</i> Preprint available for distribution, 6 p.	2013
<i>Spectral data for U(m, m)-Higgs bundles.</i> Preprint available for distribution, 12 p.	2013
<i>Monodromy of the SL<sub>2</sub> Hitchin fibration.</i> ArXiv:1111.2550v2 <i>International Journal of Mathematics</i> , 2013.	2011
<i>Monodromy of SL(2)-Higgs bundles.</i> Preprint 30 p. Transfer Report, Oxford University. Examiners: F. Kirwan and T. Hausel	2010
<i>A symplectic approach to constrained mechanical systems.</i> Preprint, 60 p. Tesis de Licenciatura (i.e., Master's Thesis), University of La Plata, Argentina.	2008

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INVITED TALKS IN

<i>9th International ISAAC Congress,</i> Krakow, Poland.	August 2013
<i>School of Mathematics,</i> University of Adelaide, Australia.	June 2013
<i>Mathematics Department, NUS,</i> National University of Singapore, Singapore	May 2013
<i>Faculté des Sciences d'Orsay,</i> Université Paris-Sud, France	April 2013
<i>Topology of moduli spaces of representations,</i> Miraflores, Spain	March 2013

	<i>Geometry Seminar,</i> Heidelberg University, Germany	December 2012
	<i>Higgs bundles and projective geometry seminar,</i> Heidelberg University, Germany	November 2012
	<i>Seminario de Geometría Algebraica,</i> Universidad de Buenos Aires, Argentina	June 2012
	<i>Workshop on Geometry of Surface Group Representations,</i> Centre de Recerca Matemática, Bellaterra, Barcelona, Spain	May 2012
	<i>Seminario de Geometría,</i> Facultat de Matemàtiques i Estadística, Universitat Politècnica de Catalunya, Bellaterra, Barcelona, Spain	May 2012
	<i>Ciclo de seminários em Geometria, Topologia e Física-Matemática,</i> Centro de Matemática da Universidade do Minho, Portugal	April 2012
	<i>Geometry seminar.</i> Universidad Nacional de La Plata, Argentina.	August 2011
	<i>Latin American School on Algebraic Geometry and Applications.</i> La Cumbre, Cordoba, Argentina.	August 2011
	<i>GEOMAPS retreat/workshop.</i> Centre for Quantum Geometry of Moduli Spaces, Aarhus University, Denmark.	May 2011
	<i>Annual meeting of the Argentinian Mathematics Society.</i> Mar del Plata, Argentina.	September 2009
	<i>Iberoamerican meeting on Differential Geometry and Applications,</i> Tenerife, Spain.	June 2008
GRADUATE TALKS	<i>Spectral data for the Hitchin fibration.</i> Junior Geometry Seminar, Oxford University, UK.	May 2012
	<i>Spectral data for principal Higgs Bundles.</i> Junior Geometry Seminar, Oxford University, UK.	May 2011
	<i>Monodromy of <math>SL(2)</math>-Hitchin Systems.</i> Junior Geometry Seminar, Oxford University, UK.	February 2010
AFFILIATIONS	<i>Junior Member.</i> Isaac Newton Institute, Cambridge, UK.	2010- <i>present</i>
	<i>Associate Member.</i> Centre for Quantum Geometry of Moduli Spaces, Denmark.	2011- <i>present</i>
VISITS	<i>School of Mathematics,</i> University of Adelaide, Australia.	June 2013
	<i>Mathematics Department,</i> University of Oxford, UK.	May-June 2013
	<i>Mathematics Department ,</i> National University of Singapore, Singapore.	May 2013
	<i>Faculté des Sciences d'Orsay,</i> Paris, France.	April-May 2013
	<i>Centre de Recerca Matemática,</i> Barcelona, Spain.	May 2012
	<i>Poincaré Institute,</i> Paris, France.	February, March 2012
	<i>Centre for Quantum Geometry of Moduli Spaces,</i> Aarhus University, Denmark.	June 2011

*Erwin Schrödinger International Institute for Mathematical Physics*, Vienna, Austria. Oct. 2010  
*Instituto de Matemática Pura e Aplicada*. IMPA, Rio de Janeiro, Brasil. Jan. & Feb. 2006-2008

ACADEMIC  
EXPERIENCE

**Seminar Organizer**, University of Heidelberg, Germany. 2013  
*Characteristic classes*  
 Together with A. Wienhard, D. Alessandrini and G.S. Lee.

**Research seminar Organizer**, University of Heidelberg, Germany. 2012-2013  
*Higgs bundles and projective geometry seminar*  
 Together with A. Wienhard, D. Alessandrini and G.S. Lee.

**Seminar Organizer**, University of Heidelberg, Germany. 2012-2013  
*Curves and Surfaces*  
 Together with A. Wienhard and G.S. Lee.

**Journal Referee**. Mathematics journal. 2012- *present*

**Interviewer**, Magdalen College, University of Oxford. 2011  
 Assisting Prof. Alison Etheridge with undergraduate mathematics entrance interviews.

**Editor**, New Collection, ISSN : 1757-2541. 2010-2011

**Marker**, Mathematical Institute, University of Oxford. 2009-2011  
 Marking prospective mathematics undergraduate entrance exams.

**Interviewer**, St. Peter's College, University of Oxford. 2009  
 Assisting Prof. L. Mason with undergraduate mathematics entrance interviews.

UNIVERSITY  
TEACHING

**College tutorials**, University of Oxford, UK.  
 As a *Stipendiary Lecturer in Mathematics* for Trinity College and Magdalen College  
 As a *Retained Lecturer* for Hertford College  
 As a *College Tutor* for New College, St. Peter's College, Lincoln College and Hertford College.

FIRST YEAR in BA Mathematics

- *Linear Algebra I* 2011
- *Linear Algebra II* 2011
- *Groups, Rings and Fields* 2011
- *3D Calculus* 2010
- *Revision for Paper D.* 2010

SECOND YEAR in BA Mathematics

- *Number Theory* 2012
- *Topology* 2011-2012
- *Analysis* 2010-2012
- *Integration* 2010-2012
- *Multivariable Calculus* 2010-2012
- *Calculus of Variations* 2010-2011

**Class Tutor**, Mathematical Institute, Oxford, UK.  
 Taught problem class to 10 ~ 15 undergraduate and master students.

	<ul style="list-style-type: none"> <li>• <i>B9. Algebraic Number Theory (&amp; Revision Classes).</i> 2010</li> </ul>	
	<p><b>Teaching Assistant</b>, Mathematical Institute, University of Oxford. Marked problem sheets and help in a class of 10 ~ 15 undergraduate and master students.</p> <ul style="list-style-type: none"> <li>• <i>B9. Algebraic Number Theory</i>, Class Tutor: Prof. Victor Flynn. 2010</li> <li>• <i>B3. Geometry of Surfaces</i>, Class Tutor: Dr. Andrew Dancer. 2009</li> <li>• <i>C9.1 Elliptic Curves</i>, Class Tutor: Prof. Victor Flynn. 2009</li> </ul>	
	<p><b>Teaching Assistant</b>, National University of La Plata, Argentina. In charge of problem classes of ~ 100 students together with other TA's and Class Tutor At the Mathematics department,</p> <ul style="list-style-type: none"> <li>• <i>Mathematical Analysis</i>, 2006-2008</li> </ul> <p>At the Engineering department,</p> <ul style="list-style-type: none"> <li>• <i>Applied Mathematics: Probabilities and Statistics</i> 2006-2008</li> </ul>	
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TEACHING FOR INTERNATIONAL PROGRAMS	<p><b>WISC Tutor</b>, Oxford, UK. Individual tutorial, Chicago University and Boston University</p> <ul style="list-style-type: none"> <li>• <i>Analysis</i>. 2012</li> <li>• <i>Managerial Calculus</i>. 2012</li> </ul>	
	<p><b>OPUS Tutor</b>, Oxford Program for Undergraduate Studies, Oxford, UK. Individual tutorial, Washington University.</p> <ul style="list-style-type: none"> <li>• <i>Probability and statistics</i>. 2010-2011</li> </ul>	
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TEACHING AT HIGH SCHOOL LEVEL	<p><b>CIE Tutor</b>, Center for International Education, Oxford. One to one tutorials to visiting high school students.</p> <ul style="list-style-type: none"> <li>• <i>A level Mathematics</i> 2009-2011</li> <li>• <i>A level Further Mathematics</i> 2009-2011</li> <li>• <i>GCSE Sciences</i> 2009-2011</li> </ul>	
	<p><b>CIE Summer Class Tutor</b>, Center for International Education, Oxford. Teacher for a class of 12 visiting students of a summer program.</p> <ul style="list-style-type: none"> <li>• <i>A level Further Mathematics</i> 2009-2011</li> </ul>	
	<p><b>Junior Professor</b>, National College (High School). La Plata. Argentina. Teacher for a class of 20 final year students</p> <ul style="list-style-type: none"> <li>• <i>Introduction to Geometry</i>. 2007</li> </ul>	
	<p><b>Tutor and Mentor online</b>, <i>Tutor.com</i>, New York City, US. (through Latinhire). 2005-2008 Mentor of a group of 20 tutors, and online one to one tutor.</p>	
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ADDITIONAL EXPERIENCE	<p><b>Book giver</b>, World Book Night, UK 2011-2012</p>	
	<p><b>IT Assistant</b>, New College, University of Oxford. 2011</p>	
	<p><b>Language Helper</b>, Language Center, University of Oxford. 2011</p>	
	<p><b>Treasurer</b>, Middle Common Room, New College, University of Oxford. 2010-2011</p>	
	<p><b>Cultural events organizer</b>, New College, University of Oxford. 2010-2011</p>	
	<p><b>Conference Assistant</b>, New College, University of Oxford. 2010</p>	
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SCHOOLS AND WORKSHOPS ATTENDED WITH FINANCIAL SUPPORT	<i>9th International ISAAC Congress</i> , Krakow, Poland.	2013
	<i>Mathematische Arbeitstagung</i> , Bonn, Germany.	2013
	<i>Trends in Theoretical Physics V</i> , La Plata, Argentina.	2013
	<i>ICMAT Laboratory "Nigel Hitchin" retreat</i> , Madrid, Spain.	2013
	<i>Heidelberg-Karlsruhe-Strasbourg Geometry Day I</i> , Heidelberg, Germany.	2013
	<i>Advances in Topology</i> , Oxford, UK.	2012
	<i>Mathematics and Physics of moduli spaces</i> , Heidelberg, Germany.	2012
	<i>Workshop on Geometry of Surface Group Representations</i> , CRM, Spain.	2012
	<i>Conference: Surface groups in Paris</i> . IHP, Paris, France.	2012
	<i>Workshop on Moduli Spaces of Representations</i> . IHP, Paris, France.	2012
	<i>Principal G-bundles</i> . Madrid, Spain.	2011
	<i>Latin American School on Algebraic Geometry and Applications</i> . Argentina.	2011
	<i>Twistors, Geometry and Physics</i> . Oxford University, Oxford, UK.	2011
	<i>Moduli Spaces: Closing Conference</i> . Isaac Newton Institute, Cambridge, UK.	2011
	<i>Masterclass: Generalized complex geometry</i> , by Prof. N. Hitchin and M. Gualtieri. Denmark.	2011
	<i>Representation of Surface Groups and Higgs Bundles</i> . Oxford University, Oxford, UK.	2011
	<i>School on Moduli Spaces</i> . Isaac Newton Institute, Cambridge, UK.	2011
	<i>Higher structures in mathematics and physics</i> . Vienna, Austria.	2010
	<i>Annual meeting of the Argentinian Mathematics Society</i> . Argentina.	2006, 2007, 2009
	<i>Representations, Lie theory and physics</i> . Maresias, Brazil.	2009
	<i>International conference on mathematical physics</i> . Prague, Czech Republic.	2009
	<i>Geometry and physics: Atiyah80</i> . University of Edinburgh, Scotland, UK.	2009
	<i>II Latinoamerican conference on Lie groups in geometry</i> . Córdoba, Argentina.	2008
<i>Iberoamerican meeting on geometry, mechanics and control</i> . Stg. de Compostela, Spain.	2008	
<i>Iberoamerican meeting on differential geometry and Applications</i> . Tenerife, Spain.	2008	
<i>II International summer school on geometry, mechanics and control</i> . La Palma, Spain.	2008	
<i>Sixth workshop on Lie theory and geometry</i> . Cordoba, Argentina.	2007	
<i>3rd conference on differential geometry</i> . La Falda, Argentina.	2007	

LANGUAGES

**Spanish** *Native*

**English and French** *Fluent*

**Portuguese and Italian** *Understanding of written and spoken language*

**German** *Currently learning: A2*

REFERENCES

**Prof. Nigel Hitchin** (D.Phil. Supervisor). *hitchin@maths.ox.ac.uk*

**Prof. Anna Wienhard** (Post-doc reference). *wienhard@mathi.uni-heidelberg.de*

**Prof. Victor Flynn** (Graduate advisor and teaching reference). *flynn@maths.ox.ac.uk*

**Dr. Tamas Hausel** (D.Phil. 1 semester co-supervisor). *hausel.ox.ac.uk*

**Prof. Andrew Dancer** (Teaching reference). *dancer@maths.ox.ac.uk*