

University of California, Berkeley,
Department of Mathematics,
970 Evans Hall #3840,
Berkeley, CA 94720-3840 USA
☎ (510) 642-8204
✉ libland@math.berkeley.edu
🌐 www.math.berkeley.edu/~libland/
US Citizen, Canadian Citizen

David Li-Bland

Current Employment

- 2014– **Visiting Assistant Professor**, *U.C. Berkeley.*
- 2013–2014 **Parental Leave.**
- 2012– **NSF Mathematical Sciences Postdoctoral Research Fellowship**, *U.C. Berkeley.*

Education

- 2007–2012 **Ph. D.**, *University of Toronto*, Advisor: Eckhard Meinrenken.
Mathematics
- 2006–2007 **M. Sc.**, *University of Chicago.*
Mathematics
- 2001–2005 **Hons. B. Sc.**, *University of Toronto*, *High Distinction.*
Mathematics

Research Interests

Differential Geometry, Lie Theory, Symplectic/Poisson Geometry, Mathematical Physics

Research Honours and Awards

- 2014 **André Lichnerowicz prize in Poisson geometry.**
- 2012–2015 **NSF Mathematical Sciences Postdoctoral Research Fellowship**, *Award No.: DMS-1204779.*
- 2012 **NSERC PDF**, *Declined.*
- 2012 **Malcolm Slingsby Robertson Prize**, *University of Toronto*, (Dissertation prize).
- 2008–2011 **NSERC CGS-D**, *University of Toronto.*
- 2008 **John Robert Gilkison Smyth Mathematics Scholarship**, *University of Toronto.*
- 2007 **Helen Sawyer Hogg Graduate Admission Award**, *University of Toronto.*
- 2006 **Robert R. McCormick Fellowship**, *University of Chicago.*
- 2005 **NSERC CGS-M**, *Declined.*
- 2005 **Chancellor's Silver Medal**, *University of Toronto*, *Trinity College.*
- 2005 **Provost's Scholar**, *University of Toronto.*
- 2005 **Coxeter Scholarship in Mathematics**, *University of Toronto.*
- 2005 **Ivan Szak Scholarship in Mathematics**, *University of Toronto.*

- 2004 **Dickinson-Cartwright Scholarship**, *University of Toronto*.
- 2004 **Margaret Ronald Taylor and Thomas Paxton Taylor Award**, *University of Toronto*.
- 2004 **Norman Stuart Robertson Scholarship in Mathematics**, *University of Toronto*.
- 2004 **University of Toronto Scholar**, *University of Toronto*.
- 2003 **NSERC USRA**, *University of Toronto*.
- 2003 **Mrs. Mitzi Newman**, *University of Toronto*.
- 2002 **NSERC USRA**, *University of Toronto*.
- 2002, 2003, 2004, 2005 **Dean's List Scholar**, *University of Toronto*.

Teaching Experience

- Fall 2014 **MAT 189 (Mathematical Methods in Classical and Quantum Mechanics)**, *U.C. Berkeley*.
- Spring 2014 **Introduction to Classical Mechanics**, *AIMS Ghana*.
 - Course Instructor
- 2009 **MAT188F (Applied Linear Algebra)**, *University of Toronto*.
 - Teaching Assistant
- 2012 **MAT1301S (Topology II)**, *University of Toronto*.
- 2010,2011 **MAT1300F (Topology I)**, *University of Toronto*.
- 2009 **MAT357S (Real Analysis I)**, *University of Toronto*.
- 2008 **MAT197S (Calculus B)**, *University of Toronto*.
- 2008 **MAT195S (Calculus II)**, *University of Toronto*.
- 2007 **MAT196S (Calculus A)**, *University of Toronto*.
- 2007 **MAT194S (Calculus I)**, *University of Toronto*.
- 2005 **MAT223S (Linear Algebra I)**, *University of Toronto*.
- 2004 **MAT223F (Linear Algebra I)**, *University of Toronto*.
 - Training
- 2009 **MAT1499 Teaching Large Mathematics Classes**, *University of Toronto*.

Supervisory Experience

Masters students supervised

- 2013 **Getachew Alemu Demessie**, *AIMS Ghana*, Current Position: Doctoral student at Heriot-Watt University in Edinburgh.
- 2013 **Grace Omollo Misereh**, *AIMS Ghana*, Current Employment: AIMS Tutor.
- 2013 **Yegbtsehiwot Zerihun Gebremariam**, *AIMS Ghana*, Current Employment: AIMS Tutor.

Publications

Submitted

- [1] David Li-Bland and Eckhard Meinrenken. On the Van Est homomorphism for Lie groupoids. March 2014.

URL <http://arxiv.org/abs/1403.1191v1>

- [2] David Li-Bland and Pavol Ševera. Moduli spaces for quilted surfaces and Poisson structures. December 2012.
URL <http://arxiv.org/abs/1212.2097>
[Published](#)
- [3] David Li-Bland. Pseudo-dirac structures. *Indagationes Mathematicae*, 25(5):pages 1054 – 1101, 2014. Poisson 2012: Poisson Geometry in Mathematics and Physics.
URL <http://arxiv.org/abs/1408.5365>
- [4] David Li-Bland and Eckhard Meinrenken. Dirac Lie Groups. *The Asian Journal of Mathematics*, 2014. 46 pages. To Appear.
URL <http://arxiv.org/pdf/1110.1525>
- [5] David Li-Bland and Pavol Ševera. On Deformation Quantization of Poisson–Lie Groups and Moduli Spaces of Flat Connections. *International Mathematics Research Notices*, (19), 2014. 18 pages. To Appear.
URL <http://arxiv.org/abs/1307.2047>
- [6] David Li-Bland and Pavol Ševera. Symplectic and Poisson geometry of the moduli spaces of flat connections over quilted surfaces. In Damien Calaque and Thomas Strobl, editors, *Mathematical Aspects of Quantum Field Theories (Mathematical Physics Studies)*. Springer, 2014. ISBN 9783319099484. 69 pages. To Appear.
URL <http://arxiv.org/abs/1304.0737v1>
- [7] David Li-Bland and Alan Weinstein. Selective Categories and Linear Canonical Relations. *Symmetry, Integrability and Geometry: Methods and Applications*, 10:pages 1–31, October 2014. doi:10.3842/SIGMA.2014.100.
URL <http://arxiv.org/abs/1401.7302>
- [8] David Li-Bland and Pavol Ševera. Integration of Exact Courant Algebroids. *Electronic Research Announcements in Mathematical Sciences*, 19:pages 58–76, 2012.
URL <http://arxiv.org/abs/1101.3996>
- [9] David Li-Bland. AV-Courant Algebroids and Generalized CR Structures. *Canadian Journal of Mathematics*, 63(4):pages 938–960, 2011.
URL <http://arxiv.org/abs/0811.4470>
- [10] David Li-Bland and Pavol Ševera. Quasi-Hamiltonian groupoids and multiplicative Manin pairs. *International Mathematics Research Notices*, (10):pages 2295–2350, 2011.
URL <http://arxiv.org/abs/0911.2179>
- [11] David Li-Bland and Eckhard Meinrenken. Courant algebroids and Poisson geometry. *International Mathematics Research Notices*, (11):pages 2106–2145, 2009.
URL <http://arxiv.org/abs/0811.4554>
[Ph. D. Thesis](#)
- [12] David Li-Bland. *LA-Courant algebroids, and applications*. Ph.D. thesis, University of Toronto, 2012.
URL <http://arxiv.org/abs/1204.2796>

Service

Conferences

- July 2016 *Poisson 2016* Scientific/Advisory committee, jointly at Geneva and Zurich
November 2014 *Gone Fishing* local co-organizer, U.C. Berkeley

Seminars

- Spring 2013 *Seminar on integration of Courant algebroids* co-organizer, U.C. Berkeley
2010-2011 *Symplectic geometry seminar* organizer, University of Toronto
2009-2010 *Departmental council*, University of Toronto
2009-2010 *Graduate planning committee*, University of Toronto
2008-2009 *Graduate seminar committee*, University of Toronto

Referee for

- Journal of Geometric Mechanics
- Proceedings of the Poisson 2012 Conference
- Journal of Geometry and Physics
- Pacific Journal of Mathematics
- Journal of Differential Geometry
- Proceedings of the Poisson 2010 Conference
- Journal of Symplectic Geometry
- Cambridge University Press
- IMRN

Miscellaneous

- AMS Math Reviews* reviewer
2014 *AIMS Ghana* lecturer
2013 *AIMS Ghana* project supervisor

Talks

Invited Lecture Series and Mini Courses

- July 2014 University of Illinois at Urbana-Champaign, Poisson 2014, week long mini course, *Quasi-Poisson Geometry and Moduli of Flat Connections*.
February 2013 Université de Genève, week long mini course. *Moduli spaces and quilted surfaces*.

Invited Conference Talks

- August 2014 University of Illinois at Urbana-Champaign, Poisson 2014, *Linear symplectic categories and quantization*.
July 2012 Universiteit Utrecht, Poisson 2012, *Moduli spaces of flat connections on coloured surfaces*.
June 2012 University of Regina, CMS Summer Meeting, Special Session on Geometry and Topology of Lie Transformation Groups, *Colored moduli spaces of flat connections*.
October 2011 Washington University, *Gone Fishing Meeting*, *Lie subalgebroids of Courant algebroids*.
November 2010 University of Notre Dame, AMS Fall Central Section Meeting, Special Session on Geometry and Lie Theory, *Some examples of symplectic groupoids*.

May 2009 University of Hong Kong, Workshop on Geometry, *Courant algebroids and Poisson Geometry*.

Invited Seminar Talks

- October 2014 Pennsylvania State University/Cornell, Joint Symplectic Seminar, *TBA*
- October 2013 Fields Institute, gLab, *The moduli space of flat connections and spin networks*.
- October 2013 University of Toronto, Symplectic Geometry Seminar, *Quantization of the linear symplectic category*.
- November 2012 University of Toronto, Symplectic Geometry Seminar, *On moduli spaces*.
- October 2012 Stanford University, Northern California Symplectic Geometry Conference, *q-Poisson structures on the moduli spaces of flat connections over colored surfaces*.
- October 2010 University of Toronto, Symplectic Geometry Seminar, *Hamiltonian Spaces with Group Valued Moment Maps*.
- September 2009 University of Toronto, Symplectic Geometry Seminar, *Integration of quasi-Poisson structures*.
- February 2009 Université de Genève, Séminaire Groupes de Lie et espaces des modules, *Courant algebroids and Poisson Geometry*.
- January 2009 University of Toronto, Symplectic Geometry Seminar, *Courant algebroids and Poisson Geometry*.

Expository Talks

- April 2013 U.C. Berkeley, GRASP Seminar, *Poisson structures on moduli spaces for quilted surfaces*.
- April 2013 U.C. Berkeley, Seminar on Integrating Courant algebroids, *Ševera's Differentiation for Lie n -Groupoids*.
- February 2013 U.C. Berkeley, Seminar on Integrating Courant algebroids, *A first example: Crossed Modules and integration of action Courant algebroids, Part II*.
- January 2013 U.C. Berkeley, Seminar on Integrating Courant algebroids, *A first example: Crossed Modules and integration of action Courant algebroids*.
- February 2012 University of Toronto, Graduate Student Seminar, *Constraints in Hamiltonian Mechanics (or: How to keep a can from sliding down an incline (and make it roll instead))*.
- July 2010 University of Toronto, Informal Geometric Structures Seminar, *On Generalized Complex Structures from a Graded Geometry perspective*.
- July 2008 University of Toronto, Cool Stuff Seminar, *Synthetic Differential Geometry*.
- January 2008 University of Toronto, Graduate Student Seminar, *A Sneak Preview of Lie Algebroids and Dirac Geometry*.