

Ryan Budney
Mathematics and Statistics, University of Victoria
PO BOX 3060 STN CSC, Victoria, B.C., Canada V8W 3R4
Phone: (250) 853-3292 Fax: (250) 721-8962
rybu@uvic.ca

Citizenship: Canadian

Education, Experience:

Associate Professor	University of Victoria	2011-...
Assistant Professor	University of Victoria	2007-2011
Visitor	Institut des Hautes Études Scientifiques	2006-2007
Guest	Max Planck Institute for Mathematics	2005-2006
Visiting Assistant Professor	University of Oregon Department of Mathematics	2004-2005
Visiting Research Assistant Professor	University of Rochester Department of Mathematics	2002-2004
Ph.D. Mathematics	Cornell University	2002
B.Sc. Mathematics	University of Alberta	1995

Publications:

An obstruction to a knot being deform-spun via Alexander polynomials (with Alexandra Mozgova).
Proc. AMS. **137** (2009) 3547–3552. [arXiv/math.GT/0704.3940]

Topology of spaces of knots in dimension 3. *Proc. LMS.* **101** (2) 2010 [arXiv/math.GT/0506524]

On the homology of the space of knots. With Fred Cohen. [arXiv/math.GT/0504206]
Geometry and Topology. **13** (2009)

A family of embedding spaces. [arXiv/math.AT/0605069]
Geometry and Topology Monographs. **13** (2008) 41–83

The operad of framed discs is cyclic. [arXiv/math.AT/0607490]
Journal of Pure and Applied Algebra. Vol. **212** no. 1. (2008) 193–196

Little cubes and long knots. *Topology.* **46** (2007) 1–27. [arXiv/math.GT/0309427]

JSJ-decompositions of knot and link complements in the 3-sphere.
L'enseignement Mathématique 2 **52** (2006), 319–359. [arXiv/math.GT/0506523]

New perspectives in self-linking. With Jim Conant, Kevin Scannell and Dev Sinha.
Advances in Mathematics. **191** (2005) 78–113. [arXiv/math.GT/0303034]

On the image of the Lawrence-Krammer representation. *Journal of Knot Theory and its Ramifications.*
Vol. 14, No. 6. (2005) 1–17. [arXiv/math.GT/0202246]

The mapping class group of the genus 2 surface is linear. With Stephen J. Bigelow.
Algebr. Geom. Topol. **1** (2001), 699–708. [arXiv/math.GT/0010310]

Preprints:

An operad for splicing. [arXiv:1004.3908]

Embeddings of 3-manifolds in S^4 from the point of view of the 11-tetrahedron census. [arXiv:0810.2346]

International invited addresses:

Differential Geometry and parametrization of 3D knots	Pisa, Italy	June 28th, 2011
Algorithms, Algebra and Analysis in Four Dimensions	University of Queensland	July 20th, 2010
Georgia topology conference	University of Georgia	May 19th, 2010
Configuration Spaces: Geometry, Combinatorics and Topology	Pisa, Italy	May 12th, 2010
Conference in honour of Pierre Vogel's 65th birthday	Luminy, France	Apr. 19th, 2010
Topology of spaces of knots workshop	University of Tokyo	Feb. 17th, 2010
IMS Braids Conference	National University of Singapore	June. 25th, 2007
Braids and their Ramifications	Cortona, Italy	May 23rd, 2007
Knots and Operads in Roma	Università di Roma "La Sapienza"	July. 13th, 2006
International conference on geometry, integrable systems and visualization	Osaka City University, Japan	Jan. 27th, 2006
Invariants de noeuds et des variétés de dimension 3	Louvain-la-Neuve, Belgium	Nov. 23rd, 2005
Cascade Topology Seminar	Banff, Alberta	July. 14th, 2005
COE Conference in honor of Fred Cohen	University of Tokyo	July. 6th, 2005
Cascade Topology Seminar	Oregon State University	Nov. 13th, 2004
Alberta Topology Seminar	Banff, Alberta	Aug. 20th, 2004
Georgia Topology Conference	University of Georgia	May 23rd, 2002

Colloquia:

Department Colloquium	Kansas State University	Nov. 11th, 2010
Department Colloquium	University of Regina	Dec. 8th, 2009
Department Colloquium	University of Victoria	Mar. 10th, 2006
Department Colloquium	University of Oregon	Nov. 29th, 2004
Department Colloquium	University of Calgary	Sep. 2nd, 2004
Pure Mathematics Colloquium	University of Waterloo	Jan. 7th, 2004

Seminar talks:

Terao's Arrangements Conference	UBC	August 8th, 2011
Functor Calculus and Operads	BIRS / Banff	Mar. 14th–18th, 2011
Topology Seminar	Indiana University	Feb. 23rd, 2011
Topology Seminar	Kansas State University	Nov. 11th, 2010
Algebra, Geometry and Combinatorics Seminar	University of Queensland	July 6th, 2010
Topology Seminar	University of British Columbia	March 3rd, 2010
Saito's Informal Mathematics Seminar	IPMU, Tokyo	Feb. 19th, 2010
Topology Seminar	Nihon University	Feb. 18th, 2010
Alberta Topology Seminar	Goldeye Centre, Alberta	July 27th–29th, 2009
Complex Geometry Seminar	University of Rome, Tor Vergata	June 18th, 2009
Topology Seminar	University of British Columbia	Mar. 5th, 2008
Basic Notions Seminar	University of Oregon	Jan. 18th, 2008
Topology Seminar	University of Rochester	Nov. 30th, 2007
Topology Seminar	University of Virginia	Nov. 16th, 2007
Topology Seminar	University of Copenhagen	Mar. 27th, 2007
Séminaire de mathématiques du LMAM	Université de Bretagne-Sud	Mar. 23rd, 2007
Topology Seminar	University of Grenoble	Mar. 16th, 2007
Chevalley Seminar	Paris 7	Feb. 22nd, 2007
Topology Seminar	University of Nice	Jan. 29th, 2007
Topology Seminar	Paris 13 Nord	Jan. 12th, 2007
Séminaire Groupes Quantiques et Géométrie de Poisson	Ecole Polytechnique, Paris	Dec. 12th, 2006
Algebra Seminar	Warwick University, UK	Mar. 3rd, 2006
Topology Seminar	Oxford University, UK	Feb. 27th, 2006
Topology Seminar	University of Bonn	Feb. 6th, 2006
Knot Theory Seminar	Osaka University	Feb. 1st, 2006
Topology Seminar	Kyushu University, Japan	Jan. 25th, 2006
COE Seminar	University of Tokyo	Jan. 18th, 20th, 2006
Topology Seminar	University of Tokyo	Jan. 17th, 2006
Topology Seminar	Nihon University	Jan. 14th, 2006
Topology Seminar	Tokyo Metropolitan University	Jan. 12th, 2006
Topology Seminar	Université de Lille 1, France	Nov. 25th, 2005
Seminario di Algebra e Geometria	Università di Roma "La Sapienza"	Oct. 26th, 2005
Topology Seminar	University of Bonn	Oct. 18th, 2005
MPI Oberseminar	Max Planck Institute, Bonn	Oct. 6th, 2005

Geometry/Topology Seminar	University of Oregon	Oct. 12th, 2004
Topology Seminar	University of Virginia	Apr. 8th, 2004
Topology Seminar	McMaster University	Nov. 23rd, 2003
Analysis Seminar	University of Ottawa	Aug. 13th, 2003
Topology Seminar	Université du Québec à Montréal	Oct. 12th, 2002
Topology Seminar	Brown University	Nov. 7th, 2001
Geometric Topology Seminar	Columbia University	Dec. 1st, 2000

Talks in special sessions at AMS/CMS/SMM meetings:

CMS meeting, U. Alberta, June 2011	
CMS meeting, Fredericton, N.B. June 2010.	CMS/SMM meeting, UBC, Aug. 2009.
AMS/CMS meeting, UBC, Oct. 2008.	AMS meeting, U. New Mexico, Oct. 2004.
AMS/SMM meeting, Houston, TX, May. 2004.	AMS meeting, U. Colorado, Oct. 2003.
CMS meeting, U. Alberta, June 2003.	AMS meeting, Courant Institute (NYU) Apr. 2003.
AMS meeting, Georgia Tech, Mar. 2002.	AMS meeting, Columbia U. Nov. 2000.

Other professional activities:

Reviewer for AMS Math Reviews, 13 total.

Referee for: Algebraic and Geometric Topology, Geometry and Topology, IMRN,
 Homology, Homotopy and Applications, Journal of Knot Theory and its Ramifications,
 Journal of Topology, Mathematical Proceedings of the Cambridge Philosophical Society,
 Rocky Mountain Journal of Mathematics, Topology and its Applications,
 Transactions of the AMS.

Organizer of the Spring 2011 Cascade Topology Seminar at the University of Victoria.

Organized 'Subtle Transversality' Allen Hatcher's 65th birthday conference, Banff Alberta, 2009.

Organizer of geometric topology special session, CMS meeting, Fredricton NB 2010 with Andrew Nicas.

Regular speaker at University of Oregon Geometry/Topology Seminar, University of Rochester/Canisus
 College Topology Seminar, and Cornell Topology Seminars.

Courses taught, public outreach:

I have taught many mathematics courses, from standard calculus sequence courses to differential equations, several types of linear algebra courses, abstract algebra, discrete dynamical systems, real and complex analysis, combinatorics, point-set topology, differential geometry and basic manifold theory. I have participated in a local grade-school mathematics exhibition (F.A.M.E.) and plan to make it a regular occurrence. I also occasionally meet with local highschool mathematics teachers (the L.S.A. group) to learn what is going on in high-school math education.