NITYA KITCHLOO (CV: 2018)

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Education

- Massachusetts Inst. of Tech., Mathematics, Ph.D, 1998. Thesis Advisor: Haynes R. Miller.
- California Inst. of Tech., Mathematics, B.S., 1993.

Appointments

- Chair of Mathematics Dept., Johns Hopkins University, Baltimore, July 2014–June 2017.
- Professor of Mathematics, Johns Hopkins University, Baltimore, 2010–Present.
- Associate Professor of Mathematics, University of California, San Diego, 2004–2010.
- Assistant Professor of Mathematics, Johns Hopkins University, Baltimore, 2001–2004.
- Boas Assistant Professor, Northwestern University, Evanston, 1999–2001.
- Visiting Professor of Mathematics, Northwestern University, Evanston, 1998–1999.

Teaching Experience

- **UCSD**:
  Undergraduate Courses: Calculus, Linear Algebra, Introduction to Mathematical Reasoning.
  Graduate Courses: Topics in Geometry and Topology, Graduate Topology, Learning Seminar on Geometry and Topology.
- **Johns Hopkins University**:
  Undergraduate Courses: Calculus, Linear Algebra, Elementary Number Theory.
  Graduate Courses: Graduate Topology.
- **Northwestern University**:
  Undergraduate Courses: Calculus, Elementary Number Theory.
  Graduate Courses: Graduate Topology.

Honors and Awards

- Simons Fellowship, 2017-2018.
- N.S.F Grants support from 2004 through 2017.
- A.M.S. Centennial Fellowship, 2004-2005.

Professional Activities

- Associate Editor for The American Journal of Mathematics.
- Reviewer and panelist for NSF.
- Reviewer and panelist for the Simons Foundation.
- Reviewer for several Journals: Advances in Mathematics, American Journal of Mathematics, Duke Mathematical Journal, Expositiones Mathematicae, Geometry and Topology, International Journal of Mathematics, Journal of Pure and Applied Algebra, etc.

- Organizer for Midatlantic Topology Conference, Baltimore, March, 2016.
- Organizer for AMS Special Session in Algebraic Topology, Baltimore, January, 2014.
- Organizer for AMS Special Session in Algebraic Topology, San Diego, January, 2008.

Publications

- N. Kitchloo, *Quantization of the Modular Functor and Equivariant Elliptic Cohomology*, to appear in Proceedings of Illinois Conference: Homotopy Theory, Tools and Applications (Contemp. Math.), available at: arXiv:1407.6698, 2018.

- N. Kitchloo, J. Morava, *The Stable Symplectic Category and a conjecture of Kontsevich*, to appear in Proceedings of the Saas Conference in Applied and Algebraic Topology (Contemp. Math.), available at: arXiv:1212.6905, 2018.

- N. Kitchloo, V. Lorman and S. Wilson. *The ER(2)-cohomology of $B(Z/2^q)$ and CP^n*, Canadian Journal of Mathematics, (70), No. 1, 191–217, 2018.

- N. Kitchloo, V. Lorman, and S. Wilson, *Landweber flat real pairs and $ER(n)$-cohomology*, Advances in Math. 322, 60-82, 2017.

- N. Kitchloo, V. Lorman and S. Wilson. *Multiplicative structures on Real Johnson-Wilson theories*, accepted for publication in the Proceedings of the Mid Atlantic Topology Conference (Contemp. Math.), available at: arXiv:1701.00255, 2017.

- N. Kitchloo. *On some applications of unstable Adams operations to the topology of Kac-Moody groups*, Proceedings of the AMS, Vol. 145, No. 2, 915–925, 2016.

- N. Kitchloo and S. Wilson. *The $ER(n)$-cohomology of $BO(q)$ and real Johnson-Wilson orientations for vector bundles*, Bulletin of the London Math. Soc., 47 (5), 835–847, 2015.

- N. Kitchloo and S. Wilson. *The Morava K-theory of $BO(q)$ and $MO(q)$*, Algebraic and Geometric Topology, 15, 3049–3058, 2015.

- N. Kitchloo. *The Stable Symplectic category and Quantization*, Contemporary Math.(AMS), Vol. 620, 251–280, 2014.

- N. Kitchloo. *On the Topology of Kac-Moody groups*, Math. Zeit. 276, No. 3-4, 727-756, 2014.

- N. Kitchloo and S. Wilson. *Unstable Splittings of Real Spectra*, Algebraic and Geometric Topology, Vol. 13, No. 2, 1053-1070, 2013.

- J. Morava and N. Kitchloo. *Spin Cobordism Categories in Low Dimensions*, Pure and Applied Mathematics Quarterly, Vol.6, No.2, 295-306, 2010.

- M. Abreu, G. Granja and N. Kitchloo. *Compatible complex structures on symplectic rational ruled surfaces*, Duke Math. Journal, 148, No.3, 539-600, 2009.

- R. Cohen, S. Galatius and N. Kitchloo. *Universal moduli spaces of surfaces with flat connections and cobordism theory*, Advances in Math. 221, 1127-1146, 2009.

- N. Kitchloo. *Dominant K-theory and integrable highest weight representations of Kac-Moody groups*, Advances in Math. 221, 1191-1126, 2009.

- N. Kitchloo and S. Wilson. *The second real Johnson-Wilson theory and non-immersions of RPn, I, II*, Homology, Homotopy and Applications, Vol. 10, No. 3, 223-290, 2008.

- N. Kitchloo and S. Wilson. *On the Hopf ring of $ER(n)$*, Topology and its Applications, 154, 1608-1640, 2007.

- N. Kitchloo and J. Morava. *Thom prospectra and Loop group representations*, Elliptic Cohomology, London Math. Soc. Lecture Note Series (342), Cambridge Univ. Press, 214-238, 2007.

- N. Kitchloo and S. Wilson. *On Fibrations related to real spectra*, Geometry and Topology, Monographs 10, 231-238, 2006.

- M. Abreu, G. Granja and N. Kitchloo, *Moment maps, symplectomorphism groups and compatible complex structures*, J. Symplectic Geom. 3, 655-670, 2005.

- J. Aguade, C. Broto, N. Kitchloo, and L. Saumell. *Cohomology of the classifying spaces of central quotients of rank two Kac-Moody groups*, J. Math. Kyoto Univ., 45, No.3, 449-488, 2005.

- N. Kitchloo, G. Laures, and S. Wilson. *Splittings of Morava homology Hopf algebras*, Journal of Pure and Applied Algebra, 194, No.1-2, 159-168, 2004.

- N. Kitchloo, G. Laures, and S. Wilson. *On the Morava K-theories of spaces related to BO*, Advances in Mathematics, 189, No.1, 192-236, 2004.

- S. Goette, N. Kitchloo, and K. Shankar. *Diffeomorphism type of the Berger Space*, American Journal of Mathematics, 126, 395-416, 2004.

- T. Bauer, N. Kitchloo, D. Notbohm, and E. Pedersen. *Finite loop spaces are manifolds*, ACTA, 192, No.1, 5-31, 2004.

- N. Kitchloo and G. Laures. *Real structures and Morava K-theories*, K-Theory, 25, 201-214, 2002.

- N. Castellana and N. Kitchloo. *A Homotopy construction of the Adjoint representation for Lie groups*, Proceedings of the Cambridge Mathematical Society, 133, No.3, 399-409, 2002.

- C. Broto and N. Kitchloo. *Classifying spaces of Kac-Moody groups*, Mathematische Zeitschrift, No.240, 621-649, 2002.

- N. Kitchloo and K. Shankar. *On Complexes equivalent to S^3-bundles over S^4*, International Mathematical Research Notices, 8, 381-394, 2001.

- N. Kitchloo. *Cohomology splittings of Stiefel manifolds*, Journal of the London Mathematical Society, 64.2, 457-471, 2001.

Recent Invited Talks

- Conference on Homotopy Theory: Tools and App., Univ. Illinois at Urbana-Champaign, July, 2017.
- Herbert Howe Public Lecture Series, Univ. of Denver, May 2017.
- Alpine conference on Algebraic and Applied Topology, Saas, Switzerland, August, 2016.
- Conference on Modular invs. in Top. and Analysis, Univ. Regensburg, Germany, August, 2014.
- Conference on Algebraic Topology, MSRI, Berkeley, January 2014.
- Summer school on Field Theories, Univ. Münster, Germany, October 2013.
- Summer school on Kac-Moody groups, Univ. Copenhagen, Denmark, June 2013.
- Conference on Operads and the Grothendieck-Teichmüller group, Oxford, England, April 2013.
- Conference on Topology, Northwestern Univ., March, 2013.
- Conference on Symplectic and low dimensional Topology, Simons Center, NY, December 2012.
- International Conference on Strings and Automorphic Forms, Univ. Bochum, Germany, August 2012.
- Conference on Topology, Stanford Univ., July, 2012.
- International Conference on Algebraic Topology, Warsaw, Poland, 2009.
- International Conference on Algebraic Topology, Univ. Bonn, Germany, June 2008.
- International Conference on Algebraic Topology, Johns Hopkins University, March 2007.
- Workshop in Geometry and Topology, Morelia, Mexico, January 2006.
- International Conference on Algebraic Topology, Isle of Skye, Scotland, June 2005.
- Workshop and Conference on Algebraic Topology, Kinosaki, Japan, July 2004.

Background Information

- Nationality: US. Citizen.
- Languages Spoken: English, French, German, Hindi, Portuguese and Spanish.