

W. Stephen Wilson

Education:

S.B., M.I.T. (Math) 1969
S.M., M.I.T. (Math) 1969
Ph.D., M.I.T. (Math) 1972

Field: Algebraic Topology: Homotopy Theory: Complex Cobordism: Brown-Peterson
Homology: Morava K-theory

Advisor: F.P. Peterson (1930-2000)

Positions:

1980-present Professor of Mathematics, The Johns Hopkins University
1993-1996 Chair, Department of Mathematics, The Johns Hopkins University
1977-80 Associate Professor, The Johns Hopkins University
1974-78 Assistant Professor, Princeton University
1972-74 Instructor, Princeton University

Visiting Positions:

2006 (Jan-August) Senior Advisor for Mathematics, Office of Elementary
and Secondary Education, U.S. Department of Education
1998-99 Visiting Professor:
Kyoto University
Centre de Recerca Matemàtica, Institute d'Estudis Catalans
1983-84 Visiting Professor:
I.M.P.A., Rio de Janeiro
University of Witwatersrand
University of Melbourne
National Taiwan University
R.I.M.S., Kyoto University
1982 (Spring) Visiting Professor, Porto University
1980-81 Visiting Professor:
Hebrew University
Tata Institute of Fundamental Research
Osaka City University
1978 (Spring) Visiting Senior Mathematician, Oxford University
1977-78 Member, Institute for Advanced Study, Princeton
1975 (Spring) Visiting Assistant Professor, U.C.S.D.
1974-75 Member, Institute for Advanced Study, Princeton

Honors:

Conference and banquet in honor of my, and Douglas C. Ravenel's, 60th birthdays, March 10-13, 2007.

The Mathematical Society of Japan's Seki-Takakazu Prize for the Japan-U.S. Mathematics Institute, March, 2006

The Johns Hopkins University Homewood Student Council Award for Excellence in Teaching, 2000

Alfred P. Sloan Research Fellow, 1977-1979

Invited One Hour Address, AMS Summer meeting, Duluth, Minn., 1979

A series of 10 lectures, CBMS Regional Conference, 1980, SUNY at Albany

Conferences organized

Special session at the AMS annual meeting, Baltimore, January, 1992.

Special session at the AMS annual meeting in honor of J. Michael Boardman's 60th birthday, Baltimore, January, 1998.

Special session at the AMS annual meeting, Washington, January, 2000.

JAMI conference at Johns Hopkins University, March, 2000.

Special session at the AMS annual meeting, Baltimore, January, 2003.

Conference in Kinosaki, Japan, in honor of Goro Nishida's 60th birthday, July, 2003.

Special session at the AMS regional meeting in honor of the 60th birthdays of Martin Bendersky and Don Davis, Newark, Delaware, April, 2005.

Special session at the AMS annual meeting, Baltimore, January, 2003.

Contact information.

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REFERENCES

- [1] W. S. Wilson. A new relation on the Stiefel-Whitney classes of spin manifolds. *Illinois Journal of Mathematics*, 17:115–127, 1973.
- [2] W. S. Wilson. The Ω -spectrum for Brown-Peterson cohomology, Part I. *Commentarii Mathematici Helvetici*, 48:45–55, 1973.
- [3] D. C. Johnson and W. S. Wilson. Projective dimension and Brown-Peterson homology. *Topology*, 12:327–353, 1973.
- [4] D. C. Ravenel and W. S. Wilson. Bipolynomial Hopf algebras. *Journal of Pure and Applied Algebra*, 4:41–45, 1974.
- [5] D. C. Ravenel and W. S. Wilson. The Hopf ring for complex cobordism. *Bulletin of the American Mathematical Society*, 80:1185–1189, 1974.
- [6] W. S. Wilson. The Ω -spectrum for Brown-Peterson cohomology, Part II. *American Journal of Mathematics*, 97:101–123, 1975.
- [7] W. S. Wilson. The Ω -spectrum for Brown-Peterson cohomology, Part III. Unpublished, 1975.
- [8] D. C. Johnson and W. S. Wilson. BP-operations and Morava’s extraordinary K-theories. *Mathematische Zeitschrift*, 144:55–75, 1975.
- [9] H. R. Miller and W. S. Wilson. On Novikov’s Ext^1 modulo an invariant prime ideal. In D. Davis, editor, *Reunion Sobre Teoria de homotopia, Universidad de Northwestern, Agosto 1974*, number 1 in Serie notas de matemática y simposia, pages 159–166, Mexico, D.F., 1975. Sociedad Matematica Mexicana.
- [10] D. C. Johnson, H. R. Miller, W. S. Wilson, and R. S. Zahler. Boundary homomorphisms in the generalized Adams spectral sequence and the nontriviality of infinitely many γ_t in stable homotopy. In D. Davis, editor, *Reunion Sobre Teoria de homotopia, Universidad de Northwestern, Agosto 1974*, number 1 in Serie notas de matemática y simposia, pages 47–63, Mexico, D.F., 1975. Sociedad Matematica Mexicana.
- [11] H. R. Miller, D. C. Ravenel, and W. S. Wilson. Novikov’s Ext^2 and the non-triviality of the gamma family. *Bulletin of the American Mathematical Society*, 81:1073–1075, 1975.
- [12] H. R. Miller and W. S. Wilson. On Novikov’s Ext^1 modulo an invariant prime ideal. *Topology*, 15:131–141, 1976.
- [13] D. C. Ravenel and W. S. Wilson. The Hopf ring for complex cobordism. *Journal of Pure and Applied Algebra*, 9:241–280, 1977.
- [14] H. R. Miller, D. C. Ravenel, and W. S. Wilson. Periodic phenomena in the Adams-Novikov spectral sequence. *Annals of Mathematics*, 106:469–516, 1977.
- [15] D. C. Johnson and W. S. Wilson. The projective dimension of the complex bordism of Eilenberg-Mac Lane spaces. *Osaka Journal of Mathematics*, 14:533–536, 1977.
- [16] D. M. Latch, R. W. Thomason, and W. S. Wilson. Simplicial sets from categories. *Mathematische Zeitschrift*, 164:195–214, 1979.
- [17] D. C. Ravenel and W. S. Wilson. The Morava K -theories of Eilenberg-Mac Lane spaces and the Conner-Floyd conjecture. *American Journal of Mathematics*, 102:691–748, 1980.
- [18] R. W. Thomason and W. S. Wilson. Hopf rings in the bar spectral sequence. *Quarterly Journal of Mathematics*, 31:507–511, 1980.
- [19] W. S. Wilson. Unstable cohomology operations. In *Topics in homotopy theory and cohomology theory. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 27-29, 1980*, volume 419, pages 18–25, Kyoto University, Kyoto, Japan, March 1981. RIMS Kokyuroku.
- [20] W. S. Wilson. *Brown-Peterson homology: an introduction and sampler*. Number 48 in C.B.M.S. Regional Conference Series in Mathematics. American Mathematical Society, Providence, Rhode Island, 1982.
- [21] W. S. Wilson. Towards BP_*X . In S. Gitler, editor, *Symposium on Algebraic Topology in Honor of José Adem*, Contemporary Mathematics, pages 345–351, Providence, Rhode Island, 1982. American Mathematical Society.
- [22] W. S. Wilson. The complex cobordism of BO_n . *Journal of the London Mathematical Society*, 29(2):352–366, 1984.

- [23] W. S. Wilson. Brown-Peterson metastability and the Bendersky-Davis conjecture. *Publications of Research Institute of Mathematical Sciences, Kyoto University*, 20:1037–1051, 1984.
- [24] W. S. Wilson. The Hopf ring for Morava K -theory. *Publications of Research Institute of Mathematical Sciences, Kyoto University*, 20:1025–1036, 1984.
- [25] D. C. Johnson and W. S. Wilson. The Brown-Peterson homology of elementary p -groups. *American Journal of Mathematics*, 107:427–454, 1985.
- [26] H. S. Song and W. S. Wilson. On the non-immersion of products of real projective spaces. *Transactions of the American Mathematical Society*, 318:327–334, 1990.
- [27] D. C. Johnson, W. S. Wilson, and D. Y. Yan. Brown-Peterson homology of elementary p -groups, II. *Topology and its Applications*, 59:117–136, 1994.
- [28] J. M. Boardman, D. C. Johnson, and W. S. Wilson. Unstable operations in generalized cohomology. In I. M. James, editor, *The Handbook of Algebraic Topology*, chapter 15, pages 687–828. Elsevier, 1995.
- [29] D. C. Ravenel and W. S. Wilson. The Hopf ring for $P(n)$. *Canadian Journal of Mathematics*, 48(5):1044–1063, 1996.
- [30] W. S. Wilson. Wei-Liang Chow. *Notices of the American Mathematical Society*, 43(10):1117–1124, October 1996. Organizer.
- [31] P. J. Eccles, P. R. Turner, and W. S. Wilson. On the Hopf ring for the sphere. *Mathematische Zeitschrift*, 224(2):229–233, 1997.
- [32] D. C. Johnson and W. S. Wilson. On a theorem of Ossa. *Proceedings of the American Mathematical Society*, 125(12):3753–3755, 1997.
- [33] W. S. Wilson. Hopf ring. In *Encyclopaedia of Mathematics, Supplementary Volume I*, pages 299–300. Kluwer Academic Publishers, 1997.
- [34] M. J. Hopkins, D. C. Ravenel, and W. S. Wilson. Morava Hopf algebras and spaces $K(n)$ equivalent to finite Postnikov systems. In Paul S. Selick et. al., editor, *Stable and Unstable Homotopy*, volume 19 of *The Fields Institute for Research in Mathematical Sciences Communications Series*, pages 137–163, Providence, R.I., 1998. American Mathematical Society.
- [35] D. C. Ravenel, W. S. Wilson, and N. Yagita. Brown-Peterson cohomology from Morava K -theory. *K-Theory*, 15(2):149–199, 1998.
- [36] H. Sadofsky and W. S. Wilson. Commutative Morava homology Hopf algebras. In M. E. Mahowald and S. Priddy, editors, *Homotopy Theory in Algebraic Topology*, volume 220 of *Contemporary Mathematics*, pages 367–373, Providence, Rhode Island, 1998. American Mathematical Society.
- [37] W. S. Wilson. Brown-Peterson cohomology from Morava K -theory, II. *K-Theory*, 17:95–101, 1999.
- [38] W. S. Wilson. $K(n+1)$ equivalence implies $K(n)$ equivalence. In J.-P. Meyer, J. Morava, and W. S. Wilson, editors, *Homotopy invariant algebraic structures: a conference in honor of J. Michael Boardman*, volume 239 of *Contemporary Mathematics*, pages 375–376, Providence, Rhode Island, 1999. American Mathematical Society.
- [39] J. M. Boardman, R. Kramer, and W. S. Wilson. The periodic Hopf ring of connective Morava K -theory. *Forum Mathematicum*, 11:761–767, 1999.
- [40] J.-P. Meyer, J. Morava, and W. S. Wilson, editors. *Homotopy invariant algebraic structures: a conference in honor of J. Michael Boardman*, volume 239 of *Contemporary Mathematics*. American Mathematical Society, Providence, Rhode Island, 1999.
- [41] W. S. Wilson. The impossible made easy: Learning to calculate with generalized cohomology. In *46-th Annual Japanese Topology Symposium Proceedings, Hokkaido University*, pages 20–30, Hokkaido, Japan, July 1999.
- [42] W. S. Wilson. Hopf rings in algebraic topology. *Expositiones Mathematicae*, 18:369–388, 2000.
- [43] J. M. Boardman and W. S. Wilson. Unstable splittings related to Brown-Peterson cohomology. In J. Aguadé, C. Broto, and C. Casacuberta, editors, *Cohomological Methods in Homotopy Theory, Barcelona Conference on Algebraic Topology, Bellaterra, Spain, June 4-10, 1998*, volume 196 of *Progress in Mathematics*, pages 35–45, Basel/Switzerland, 2001. Birkhäuser Verlag.
- [44] T. Kashiwabara and W. S. Wilson. The Morava K -theory and Brown-Peterson cohomology of spaces related to BP . *Journal of Mathematics of Kyoto University*, 41(1):43–95, March 2001.
- [45] D. Davis, J. Morava, G. Nishida, W. S. Wilson, and N. Yagita, editors. *Recent Progress in Homotopy Theory: Proceedings of a conference on Recent Progress in Homotopy Theory March 17-27, 2000*,

- Johns Hopkins University, Baltimore, MD.*, volume 293 of *Contemporary Mathematics*. American Mathematical Society, Providence, Rhode Island, 2002.
- [46] N. Kitchloo, G. Laures, and W. S. Wilson. The Morava K -theory of spaces related to BO . *Advances in Mathematics*, 189(1):192–236, 2004.
- [47] N. Kitchloo, G. Laures, and W. S. Wilson. Splittings of bicommutative Hopf algebras. *Journal of Pure and Applied Algebra*, 194:159–168, 2004.
- [48] W. S. Wilson and D.Q. Naiman. K-12 calculator usage and college grades. *Educational Studies in Mathematics*, 56:119–122, 2004.
- [49] E. C. Scott with a few hundred Steves including W. S. Wilson. The morphology of Steve. *Annals of Improbable Research*, 10(4):24–29, July/August 2004.
- [50] David Klein, with Bastiaan J. Braams, Thomas Parker, William Quirk, Wilfried Schmid, and W. Stephen Wilson. Technical assistance from Ralph A. Raimi and Lawrence Braden. Analysis by Justin Torres. Foreword by Chester E. Finn, Jr. *The State of the State MATH Standards*. Thomas B. Fordham Foundation, Washington, D.C., January 2005.
- [51] W. S. Wilson. Short response to Tunis’s letter to the editor on technology in college. *Educational Studies in Mathematics*, 58:415–420, 2005.
- [52] Barbara Reys, Carolyn Baldree, Donna Taylor, and W. S. Wilson. Grade 6: Process and standards. In Johnny W. Lott and Kathleen Nishimura, editors, *Standards & Curriculum: A view from the Nation*, pages 29–32, Reston, Virginia, 2005. NCTM.
- [53] N. Kitchloo and W. S. Wilson. On fibrations related to real spectra. In M. Ando, N. Minami, J. Morava, and W. S. Wilson, editors, *Proceedings of the Nishida Fest (Kinosaki 2003)*, volume 10 of *Geometry & Topology Monographs*, pages 237–244, 2007.
- [54] M. Ando, N. Minami, J. Morava, and W. S. Wilson, editors. *Proceedings of the Nishida Fest (Kinosaki 2003)*, volume 10 of *Geometry & Topology Monographs*, 2007.
- [55] N. Kitchloo and W. S. Wilson. On the Hopf ring for $ER(n)$. *Topology and its Applications*, 154:1608–1640, 2007.
- [56] J. M. Boardman and W. S. Wilson. $k(n)$ -torsion-free H -spaces and $P(n)$ -cohomology. *Canadian Journal of Mathematics*, 59(6):1154–1206, 2007.
- [57] Linda Plattner with W. S. Wilson. Washington state mathematics standards: Review and recommendations. On-line at Washington State Board of Education, August 2007.
- [58] Linda Plattner with W. S. Wilson. A report to the Washington State Board of Education: Follow-up to Review and Recommendations. On-line at Washington State Board of Education, February 2008.
- [59] Linda Plattner with W. S. Wilson. A report to the Washington State Board of Education: Second review of Washington K-12 mathematics standards. On-line at Washington State Board of Education, March 2008.
- [60] Linda Plattner with W. S. Wilson. Revised K-8 mathematics standards, Washington state. On-line at Washington State Board of Education, April 2008.
- [61] Linda Plattner with W. S. Wilson. Revised 9-12 mathematics standards, Washington state. On-line at Washington State Board of Education, July 2008.
- [62] W. S. Wilson. What do college students know? *Education Next*, 8(4):88, Fall 2008. Unabridged version: http://media.hoover.org/documents/ednext_20084_88_unabridged.pdf.
- [63] W. S. Wilson. Review of mathematical soundness: Background notes for WA state curriculum study. On-line at Washington State Board of Education, October 2008.
- [64] W. S. Wilson. Elementary school mathematics priorities. *AASA Journal of Scholarship & Practice*, 6(1):40–49, Spring 2009.
- [65] N. Kitchloo and W. S. Wilson. The second real Johnson-Wilson theory and non-immersions of RP^n . *Homology, Homotopy and Applications*, 10(3):223–268, 2008.
- [66] N. Kitchloo and W. S. Wilson. The second real Johnson-Wilson theory and non-immersions of RP^n , Part 2. *Homology, Homotopy and Applications*, 10(3):269–290, 2008.
- [67] J. González and W. S. Wilson. The BP-theory of two-fold products of projective spaces. *Homology, Homotopy and Applications*, 10(3):181–192, 2008.
- [68] W. S. Wilson. Arithmetic, geometry, and calculus III. A comparison of arithmetic and geometry skills with Calculus III grades, December 2008.
- [69] W. S. Wilson. Washington State High School Math Text Review. On-line at Washington State Board of Education, March 2009.

- [70] G. Martino with W.S. Wilson. Doing the math: Are maryland's high school math standards adding up to college success? Technical report, The Abell Foundation, Baltimore, Maryland, April 2009.

Education activities

Winter-Spring 1999: While visiting Japan for 8 months we enrolled our son in the local public school. This gave us a very personal view of mathematics education in Japan. Through my many visits to Japan and with my many connections to Japanese mathematicians I have kept track of mathematics education issues in Japan.

November 1999: I signed the *Open letter to Richard Riley*, Secretary of Education.

2000: The Johns Hopkins University Homewood Student Council Award for Excellence in Teaching.

1999-2002: Son used *TERC Investigations* for 2nd, 3rd, and 4th grades.

Summer 2001: I wrote the Friends School of Baltimore a well informed letter about mathematics education and TERC in particular.

<http://www.math.jhu.edu/~wsw/ED/pam1.pdf>

Winter 2001-2: I helped Jerry Dancis with a petition about the “Algebra” test in Maryland.

<http://www.math.jhu.edu/~wsw/ED/petitiondancis.html>

February 2002: Survey of mathematicians about arithmetic and calculator usage:

<http://www.math.jhu.edu/~wsw/ED/list>

February 2002: I joined a group being organized by Robin West (among others) to try to influence mathematics education at the Friends School of Baltimore.

March 4, 2002: Attend Lynn Cheney’s American Enterprise Institute conference: *Does two plus two still equal four?*

<http://www.aei.org/events/eventID.193/transcript.asp>

September 2002: I became a “national advisor” to NYC HOLD, a group fighting for mathematics education in New York City, organized, in large part, by Elizabeth Carson.

<http://www.nychold.com>

October 21, 2002: On a panel for a meeting of teachers for the Association of Independent Maryland Schools. What I had to say: <http://www.math.jhu.edu/~wsw/ED/panel>

December 2002: Gave a survey to all students at Johns Hopkins University in big service courses on their calculator usage in K-12.

2002-2003: Son used *Everyday Math* for 5th grade.

July 17, 2003: Meet with a teacher and an administrator about the mathematics program for high school for the Ingenuity Project at Baltimore Polytechnic.

<http://www.ingenuityproject.org>

October 24, 2003: Meet with teachers and administrators from the Odyssey School about their mathematics program.

2003-2004: Son used *Singapore Math* for 6th grade.

2004: On a panel for the Fordham Foundation to evaluate the K-12 mathematics standards for all states.

May 22, 2004: Attend the National Association of Scholars National Conference in New York City and its NYC-HOLD panel.

2004: W.S. Wilson and D.Q. Naiman. K-12 Calculator usage and college grades. *Educational Studies in Mathematics*, 56:119-122,2004.

<http://www.math.jhu.edu/~wsw/ED/pubver.pdf>

This paper shows that our students who had calculators “encouraged and emphasized” in K-12 had lower grades in their large service mathematics classes at Johns Hopkins University.

July 21-24, 2004: A research mathematician representative at the conference: *Mathematics Curriculum: A National View*, a meeting of the Association of State Supervisors of Mathematics and the Board of the National Council of Teachers of Mathematics and a few research mathematicians run by Johnny Lott.

This was an amazing opportunity to get to know some of the people in charge of getting state K-12 mathematics standards written and to get some insight into the problems they have to deal with.

July 25-28, 2004: Participated in a conference, the *Mathematics Standards Study Group*, organized by Roger Howe, of a dozen research mathematicians interested in K-12 mathematics education.

This conference followed up on the conference run by Johnny Lott. A multifaceted publication will come out from this conference. My contribution is mostly to the “lead essay” where we try to answer the question asked in the first conference: what is important?

<http://www.math.jhu.edu/~wsw/ED/LeadEssay.pdf>

September 2004-Present: Appointed by Provost Steven Knapp to the Johns Hopkins Council on K-12 Education.

October 15, 2004: Invited to participate as a representative of the professional mathematics community at a meeting of the Board of the Adult Numeracy Network.

November 2004: Did a writeup about mathematics for people who help in an after school program. (Really for the people who train them from Educational Equity Concepts.)

<http://www.math.jhu.edu/~wsw/ED/after.pdf>

Winter 2004-5: The Johns Hopkins University contact person for Teach for America.

2005: W.S. Wilson. Short response to Tunis’s letter to the editor on technology in college. *Educational Studies in Mathematics*, 2005 (58):415–420.

<http://www.math.jhu.edu/~wsw/ED/EDUCTunis.pdf>

I was given the opportunity to write pretty much whatever I wanted by the editor of the journal.

January 2005: David Klein, with Bastiaan J. Braams, Thomas Parker, William Quirk, Wilfried Schmid, and W. Stephen Wilson. Technical assistance from Ralph A. Raimi and Lawrence Braden. Analysis by Justin Torres. Foreword by Chester E. Finn, Jr. *The State of the State MATH Standards*. Thomas B. Fordham Foundation. (130 pages.)

<http://www.math.jhu.edu/~wsw/ED/mathstandards05FINAL.pdf>

January 2005: Testified before the Maryland State Board of Education.

January 2005: Advised Ralph Fessler, the Dean of Johns Hopkins University’s School of Professional Studies in Business and Education, on elementary school mathematics programs for the new elementary school Johns Hopkins is going to run in the near future.

February-June 2005: Consult with Johns Hopkins University Professor Peggy King-Sears and participate in her focus group. She is developing a Johns Hopkins University course of study and certificate for mathematics teachers for middle and high school.

April 6, 2005: Meet with Senator Frist's Education staffer and, later the same day, the House Science Committee Staff. Seven of us from around the country were in on these meetings about K-12 mathematics education. I was the mathematician for the group.

May 24, 2005: Testify before the Governor's Commission on Quality Education.
<http://www.math.jhu.edu/~wsw/ED/steele.pdf>

May 31, 2005: Washington Post article by Jay Mathew's "10 Myths (Maybe) About Learning Math." I was one of the several authors of the "10 Myths".
<http://www.nychold.com/myths-050504.html>

June, 2005: The writings of the *Mathematics Standards Study Group* have appeared on the web at:

<http://www.admin.ias.edu/ma/current/LectureNotes.php>

The essay I was most involved with (with Alan Tucker):

<http://www.math.jhu.edu/~wsw/ED/Generalessay.pdf>

June 1, 2005 Hear Diane Ravitch and others talk at the Brookings Institution about the education reforms in New York City.

June 9, 2005 Johns Hopkins K-12 Council met with President Brody. He suggested a major Johns Hopkins University K-12 mathematics and science initiative.

July 8, 2005: Met with Provost Steven Knapp of Johns Hopkins University to talk about his involvement in K-12 mathematics education in Maryland.

September 9, 2005 American Enterprise Institute forum: The Department of Education Twenty-Five Years Later, with William Bennett, Lamar Alexander, Rod Paige and Andrew Rotherham.

September 14-15, 2005 Brookings Institution. Conference on Algebraic Reasoning: Developmental, Cognitive, and Disciplinary Foundations for Instruction.

<http://www.brookings.edu/gs/brown/algebraicreasoning.htm>

September 21, 2005 Johns Hopkins University Council on K-12 Education. Planning for STEM initiative.

January-August, 2006: Senior Advisor for Mathematics, Office of Elementary and Secondary Education, United States Department of Education.

January 24, 2006 Observe at the National Board for Education Sciences (which oversees the Institute for Education Science) meeting.

February 3, 2006 Spend afternoon with the National Council of Teachers of Mathematics (NCTM) writing committee for the Curriculum Focal Points.

March 2-5, 2006 Finding Common Ground in K-12 Mathematics Education. Indianapolis, Indiana.

April 18, 2006 I was there when President Bush formally announced the creation of the National Mathematics Advisory Panel.

April 26, 2006 Protecting Maryland's Competitive Edge. An Action Summit hosted by the University of Maryland.

May 5, 2006 Talk to the Conference Board of the Mathematical Sciences about the National Mathematics Advisory Panel.

May 7-10, 2006 Invited participant in a Mathematical Sciences Research Institute conference: Raising the floor: Progress and setbacks in the struggle for quality mathematics education for all, Berkeley, California.

May-June, 2006 Advisor to the National Mathematics Advisory Panel.

May 22, 2006 National Mathematics Panel meeting. Washington, D.C.

May 23, 2006 Accelerating the K-12 Mathematics and Science Curriculum: Agenda for the 21st Century. The Third Annual Johns Hopkins Education Summit. I served on the panel: Thinking Big: Setting the K-12 Math and Science Agenda.

May 23-24, 2006 Russell Gersten's Center of Instruction workshop, University of Michigan, Ann Arbor, Michigan.

June 21-22, 2006 Observe the meeting of the National Academy's Study of Teacher Preparation Programs. Washington, D.C.

July 10-12, 2006 Park City Workshop on Middle School Mathematics, organized by Roger Howe and Alan Tucker.

September, 2006 Thanked in the introduction to the NCTM's Curriculum Focal Points.

Fall, 2006 Advised Matthew Peterson of the MIND Institute on mathematics for his Algebra Readiness text.

October 19-21, 2006 Represented the Johns Hopkins University Department of Mathematics at the Washington D.C. meeting of the American Mathematical Society Committee on Education where the new College Board mathematics standards were trashed.

December, 2006, and January, 2007 Pre-publication review of the mathematics content in the K-2 portion of a Houghton Mifflin mathematics program.

January, 2007 Help with the Frederick County Education Reform review and web site organized by Tom Neumark and others.

March, 2007 At the request of the Florida K-12 Chancellor I reviewed most of the draft of the revision for the mathematics content standards for Florida.

April - August, 2007 Wrote a background overview of Washington state's K-12 mathematics standards for Strategic Teaching's *Washington State Mathematics Standards: Review and Recommendations*. Also helped with the final touches on the writing of the report.

July 30-31, 2007 Attended the California 2007 mathematics adoptions meetings for Algebra Readiness programs in order to support the MIND Institute's program.

August, 2007 Helped Linda Plattner of Strategic Teaching write a summary of a comparison of the American Diploma Project with other standards.

July, 2007 - January, 2009 On the American Mathematical Society's Advisory Board for the Working Group on Preparation for Technical Careers.

Oct 8, 2007 Meet with Andres Alonso, Baltimore City Public School's new CEO, about setting up an Advisory Board for Mathematics for him.

Oct, 2007 Set up an Advisory Board for Mathematics for Baltimore City Public Schools.

Oct 25, 2007 AEI event: The Supply Side of School Reform and the Future of Educational Entrepreneurship

October 25-27, 2007 Represented the Johns Hopkins University Department of Mathematics at the Washington D.C. meeting of the American Mathematical Society Committee on Education.

November 28, 2007 Attend National Mathematics Panel meeting. Baltimore, Maryland.

January 16, 2008 Meet with the new head of mathematics for the Baltimore City Public School System to talk about the HSA and an algebra readiness course.

February 5, 2008 Help review the revised Washington State K-12 mathematics standards and report to the Washington State Board of Education.

March 10, 2008 Help review the next revision of the Washington State K-12 mathematics standards and report to the Washington State Board of Education.

Winter-Spring 2008 Help evaluate the Fulton County, Georgia, mathematics curriculum and its alignment with the state's standards. In particular, this was an opportunity to review the new TERC Investigation fifth grade materials, the new Connected Mathematics Project (all grades 6-8), some Core-Plus and SIMMS.

April 24, 2008 One of three presenters, along with R. James Milgram and William H. Schmidt, at the Leading Minds K-12 Math Education Forum.

<http://www.baltimorecp.org/leadingminds/k12math/>

May 1, 2008 Help present a draft of the revised Algebra 1 and Geometry standards to the Washington State Mathematics Panel.

May 14-16, 2008 Mathematical Sciences Research Institute (MSRI) conference on Critical Issues in Education: Teaching and Learning Algebra.

November 21, 2007 and May 20, 2008 Meet with the Abell Foundation to discuss the algebra preparation of Baltimore City Public Schools for the local Community Colleges.

Spring-Summer 2008 Help rewrite the revised Washington State K-12 mathematics standards. K-8 approved by the State Board of Education on April 28, 2008. July, 2008, 9-12 standards approved.

June 11, 2008 Testify for mathematics education to the Frederick County Public Schools Board of Education. The posting includes a brief review of the new TERC Investigations. <http://www.math.jhu.edu/~wsw/ED/fred.pdf>

June 17, 2008 On a panel for the Greater Baltimore Committee's Education Committee.

July 9, 2008 Meet with the Abell Foundation and agree to supervise Gabrielle Martino on a study of Baltimore City's alignment with the math placement test used at local community colleges.

September 3, 2008 Give a colloquium at Lehigh University to the Department of Mathematics on K-12 mathematics education.

October, 2008 Made a member of the Advisory Council to the MIND Research Institute on issues related to equal access to knowledge and skills in mathematics.

October 21, 2008 Panel member for the MIND Research Institute Forum. National Academy of Sciences. Washington DC.

October 27, 2008 Strategic Teaching's final report on K-8 textbooks for Washington State along with my math review.

<http://www.math.jhu.edu/~wsw/ED/streview.pdf>

<http://www.math.jhu.edu/~wsw/ED/wswmathreview.pdf>

January 22, 2009 On a panel at Sidwell Friends in Washington, DC, to discuss what math students need to know when they go to college.

March 2009 Report on mathematical soundness of Washington State high school textbooks

<http://www.math.jhu.edu/~wsw/ED/wahighschoolwsw.pdf>

to go with Strategic Teaching's report

<http://www.math.jhu.edu/~wsw/ED/SThs.pdf>

for the State Board of Education.

April 14, 2009 Alliance for Excellent Education one day conference: Meaningful Measurement: The Role of Assessments in Improving High School Education in the Twenty-First Century. Washington, D.C.

April 18, 2009 The Founding Advisory Board for a new Charter school in Washington, D.C., the Cordova Science and Technology College Prep Institute. First meeting.

April 21, 2009 Advisory Council meeting for the MIND Research Institute. Washington, D.C.

April 23-25, 2009 NCTM meeting, Washington, D.C.

April, 2009 Publication of "Doing the Math: Are Maryland's High School Math Standards Adding Up to College Success?" by Gabrielle Martino with W. Stephen Wilson. Published by the Abell Foundation, Baltimore, Maryland.

May 5, 2009 International Lessons about National Standards. An all day event sponsored by the Thomas B. Fordham Institute, Washington, D.C.

May 6, 2009 Learning, Arts, and the Brain Summit. An all day event at the American Visionary Art Museum, Baltimore, Maryland. Sponsored in part by the JHU K-12 Council.

May 12, 2009 Scientific Evidence in Education Forums: Building a Foundation for the Future: A Discussion on the Latest Research on Elementary School Math Curricula. Washington, D.C.

May 18, 2009 Invited speaker at a parent's organized Frederick County, Maryland, meeting about: TERC: The Untold Story. Mt. Airy, Maryland.

May 28, 2009 Attend Maryland State Board of Education Meeting for Alan Ginsburg's presentation on Singapore Mathematics and Achieve's review of Maryland's K-8 curriculum by Laura Stover and Matt Gandal.