CURRICULUM VITAE

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Education

1994 Ph.D., Harvard University.
1987 M.A., Harvard University.
1985 B.A., Columbia University, (Magna Cum Laude).

Employment History

01/2009–05/2009	Columbia University, Adjunct Professor of Astronomy.
07/2006–present	Columbia Astrophysics Laboratory, Senior Research Scientist.
12/2002–12/2003	Weizmann Institute of Science, Visiting Scientist.
07/2000–06/2006	Columbia Astrophysics Laboratory, Research Scientist.
09/1996–06/2000	Columbia Astrophysics Laboratory, Associate Research Scientist.
03/1994–08/1996	University of California at Berkeley, Post-Graduate Research Physicist.
06/1986–02/1994	Harvard University, Research Assistant.
09/1985–05/1986	Harvard University, Teaching Fellow.

Professional Societies

American Astronomical Society.
American Physical Society.
International Astronomical Union.
Phi Beta Kappa.

Academic Awards

2006 Fellow, American Physical Society.
1985 Phi Beta Kappa.
1985 Sigma Pi Sigma, Columbia University.

I. Research Experience

Current Grants as PI

Laboratory Measurements of Electron Impact Ionization in Support of the NASA Heliophysics Research Program
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Physics Supporting Research and Analysis
Effective: January 2012 - December 2014

Laboratory Studies of Halogen Chemistry in Interstellar Coulds in Support of the NASA Astrophysics Research Program
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Astrophysics Research and Analysis
Effective: November 2011 - October 2013

Improving Models of Molecular Clouds and Planetary Atmospheres: Dissociative Recombination Measurements for Molecular Ions of Astronomical Interest
Agency: National Science Foundation
Divsion: Astronomical Sciences
Program: Galactic Astronomy
Effective: July 2011 - June 2014

SHINE: Observationally Constraining the Physical Processes that Generate the Solar Wind
Agency: National Science Foundation
Division: Atmospheric and Geospace Sciences
Program: Solar-Terrestrial
Effective: April 2011 - March 2014

Development of a Novel Instrument to Study the Cosmic Origins of Organic Chemistry and the Cosmo-Chemical Pathway towards Life
Agency: National Science Foundation
Division: Astronomical Sciences
Program: Advanced Technologies and Instrumentation
Effective: September 2009 - August 2012

Further Measurements of Low Temperature Dielectronic Recombination Rate Coefficients for Photoionized Cosmic Plasmas
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Astrophysics Research and Analysis
Effective: April 2009 - March 2013

Laboratory Measurements of Dielectronic Recombination and Electron Impact Ionization in Support of NASA's Heliosphysics Research Program
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Physics Supporting Research and Analysis
Effective: January 2009 - December 2012

Completed Grants as PI

Improved Understanding of Molecular Clouds and Emission Line Objects with Laboratory Astrophysics Studies at the Heidelberg Ion Storage Ring
Agency: National Science Foundation
Divsion: Astronomical Sciences
Program: Galactic Astronomy
Effective: July 2008 - June 2011

Low Temperature Dielectronic Recombination Rates for Photoionized Cosmic Plasmas
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Physics Research and Analysis
Effective: April 2006 - March 2010

Further Measurements of High Temperature Dielectronic Recombination Rate Coefficients in Support of NASA's Sun-Earth Connection Program
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Physics Supporting Research and Analysis
Effective: February 2006 - January 2010

Improved Simulations of Cosmic Plasmas: Measurements and Modeling Thermal Energy Charge Transfer
Agency: National Science Foundation
Division: Astronomical Sciences
Program: Stellar Astronomy and Astrophysics
Effective: August 2006 - July 2009

Development of a Novel Laboratory Instrument for Studying Gas-Phase Negative Ion Chemistry
Agency: National Science Foundation
Division: Chemistry
Program: Chemical Instrumentation
Effective: September 2005 - August 2009

Sensitivity of Modeling Cosmic Plasmas to Uncertainties in Atomic and Molecular Physics
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astrophysics Theory Program
Effective: June 2004 - May 2005

Improved Simulations of Cosmic Plasmas: Measurements and Modeling Thermal Energy Charge Transfer
Agency: National Science Foundation
Division: Astronomical Sciences
Program: Galactic Astronomy
Effective: July 2003 - June 2006

New Low Temperature Dielectronic Recombination Rates for Modeling Photoionized Cosmic Plasmas
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Space Astrophysics Research and Analysis
Effective: April 2003 - March 2007

Measurements of High Temperature Dielectronic Recombination Rate Coefficients in Support of NASA's Sun-Earth Connection Program
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Physics Supporting Research and Analysis
Effective: February 2003 - January 2007

Unraveling the Physical Conditions in the Solar Atmosphere: Experimental and Theoretical Atomic Rates for Ions of Neon and Magnesium
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar Physics Research, Analysis, and Suborbital
Effective: May 2000 - April 2004

Measurements, Calculations, and Astrophysical Implications of New Low Temperature Dielectronic Recombination Rates for Modeling Photoionized Cosmic Plasmas
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Space Astrophysics Research and Analysis
Effective: February 2000 - January 2004

Level 2 Proposal for Participation in the Chandra Emission Line Project
Agency: National Aeronautics and Space Administration
Divions: Astrophysics
Program: Chandra Emission Line Project (Level 2)
Effective: October 1999 - November 2000

Measurement of Dielectronic Recombination for Modeling Astrophysical Plasmas
Agency: North Atlantic Treaty Organization
Program: International Scientific Exchange Programmes
Effective: October 1998 - October 2001

Measurement of Dielectronic Recombination for Modeling Astrophysical Plasmas
Agency: North Atlantic Treaty Organization
Program: International Scientific Exchange Programmes
Effective: October 1995 - September 1998

Completed Grants as Co-Investigator

X-Ray Spectroscopic Laboratory Astrophysics Experiments in Support of the NASA X-Ray Astronomy Flight Program (Prof. Steven M. Kahn, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: High Energy Astrophysics Supporting Research and Technology
Effective: February 1997 - May 2000

X-Ray Spectroscopic Laboratory Astrophysics Experiments in Support of the NASA X-Ray Astronomy Flight Program (Prof. Steven M. Kahn, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: High Energy Astrophysics Supporting Research and Technology
Effective: November 1994 - June 1998

Completed Grants as Collaborator

Improved Simulations of Astrophysical Plasmas: Computation of New Atomic Data (Prof. Thomas W. Gorczyca, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Physics Research and Analysis
Effective: January 2007 - December 2009

Accurate Treatment of Electron-Ion Recombination Rate Coefficients for Solar Physics (Prof. Thomas W. Gorczyca, PI)
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Supporting Research and Analysis
Effective: November 2007 - October 2008

Calculations of High Temperature Dielectronic Recombination Rate Coefficients in Support of NASA's Sun-Earth Connection Program (Prof. Thomas W. Gorczyca, PI)
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Supporting Research and Analysis
Effective: September 2004 - August 2007

Laboratory Investigations of Early Universe Chemistry (Prof. Anthony G. Calamai, PI)
Agency: National Science Foundation
Division: Astronomical Sciences
Program: Extragalactic Astronomy and Cosmology
Effective: June 2004 - May 2007

Improved Simulations of Astrophysical Plasmas: Computation of New Atomic Data (Prof. Thomas W. Gorczyca, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Physics Research and Analysis
Effective: October 2003 - September 2006

Measurements of Electron Impact Ionization in Support of NASA's Sun-Earth Connection Program (Dr. Mark E. Bannister, PI)
Agency: National Aeronautics and Space Administration
Division: Heliophysics
Program: Solar & Heliospheric Physics Supporting Research and Analysis
Effective: October 2003 - September 2006

Improved Electron Impact Ionization Data for Modeling Cosmic Plasmas: New Measurements and Theoretical Calculations (Dr. Mark E. Bannister, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Astronomy and Physics Research and Analysis
Effective: November 2003 - October 2006

Measurements and Astrophysical Implications of Charge Transfer at Thermal Energies (Dr. Charles C. Havener, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Space Astrophysics Research and Analysis
Effective: April 2002 - March 2005

Improved Simulations of Astrophysical Plasmas: Computation of New Atomic Data (Prof. Thomas W. Gorczyca, PI)
Agency: National Aeronautics and Space Administration
Division: Astrophysics
Program: Space Astrophysics Research and Analysis
Effective: March 2001 - February 2004

II. Teaching Experience

Invited Conference and Workshop Lectures

"Molecular Hydrogen Formation in the Early Universe: New Implications from Recent Laboratory Results", 3rd International Conference on Current Developments in Atomic, Molecular, Optical, and Nano Physics, Dehli, India, Dec. 2011.

"H_2 Formation in the Early Universe: Modern Day Measurements of Chemistry Long Ago", Hydrogen Cosmology Workshop, Institute for Theoretical Atomic and Molecular Physics, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, May 2011.

"The Genesis Projects: Laboratory Studies in Molecular Astrophysics from the First Stars to the Beginning of Organic Chemistry", New York Sectional Meeting of the American Physical Society, Hofstra University, Hemstead, NY, Oct. 2010.

"Experimental Studies in Laboratory Astrophysics from High z to High Z", Symposium on Laboratory Astrophysics at the Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Sep. 2010.

"Molecular Hydrogen Formation in the Early Universe: New Implications from Laboratory Measurements", Eighth International Conference on Dissociative Recombination: Theory, Experiments & Applications, Lake Tahoe, CA, Aug. 2010.

"Blowing in the Wind or Storage Ring Studies for AGN and Stellar Winds", Meeting of the Groupe de Contact Fonds National de la Recherche Scientifique (FNRS): Atomes, Molécules et Radiation, Brussels, Belgium, Oct. 2009.

"Recombination and Ionization Measurements for Astrophysics," Symposium on Physics with Cold Stored Ion Beams, Max Planck Institute for Nuclear Physics, Heidelberg, Germany, Jun. 2008.

"Progress on Laboratory Measurements of H_2 Formation for Early Universe Chemistry," Workshop on Atomic and Molecular Physics of the Early Universe, Institute for Theoretical Atomic and Molecular Physics, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Apr. 2008.

"Laboratory Astrophysics: Summary and Outlook," Atomic Ion Stage Abundances in Astrophysical Plasmas, South East Laboratory Astrophysics Workshop, Auburn, AL, Feb. 2008.

"Laboratory Astrophysics at Heavy-Ion Storage Rings," XXV International Conference on Photonic, Electronic, and Atomic Collisions, Freiberg, Germany, Jul. 2007.

"Atomic Recombination and Ionization Data Needs Cosmic Plasmas", 15th APS Topical Conference on Atomic Processes in Plasmas, Gaithersburg, MD, Mar. 2007.

"Analog and Digital Simulations of Maxwellian Plasmas for Astrophysics," 20 Years of Spectroscopy with the Electron Beam Ion Trap , Berkeley, CA, Nov. 2006.

"Cosmology in a Can: Laboratory Studies in Atomic and Molecular Physics from High z to Low Z," Israeli Physics Society, Karmiel, Israel, Dec. 2005.

"Dielectronic Recombination," American Astronomical Society, Minneapolis, MN, Jun. 2005.

"Laboratory Cosmology," American Physical Society Division of Atomic, Molecular, and Optical Physics (DAMOP), Lincoln, NE, May 2005.

"Ionization and Recombination: Laboratory Measurements and Observational Consequences," X-Ray Diagnostics of Astrophysical Plasmas, Cambridge, MA, Nov. 2004.

"The Importance of M-Shell Iron 3 to 3 Dielectronic Recombination in Active Galactic Nuclei," Atomic Collision Dynamics (Energiereiche Atomare Stöße), Riezlern im Kleinwalsertal, Austria, Feb. 2004.

"Uncertainties in Chemical Abundances and the Metagalactic Radiation Field at High Redshift," Israeli National Astrophysics Conference Series, Rehovot, Israel, Feb. 2003.

"Ion Storage Ring Measurements of Dielectronic Recombination for Astrophysically Relevant Iron Ions: A Progress Report," 17th International Conference on the Application of Accelerators in Research and Industry, Denton, TX, Nov. 2002.

"Ion Storage Ring Measurements of Low Temperature Dielectronic Recombination Rate Coefficients for Modeling X-Ray Photoionized Cosmic Plasmas," NASA Laboratory Astrophysics Workshop, Moffett Field, CA, May 2002.

"Dielectronic Recombination: Theory, Experiment, and Some Astrophysical Implications," Workshop on Complex Phenomena Involving Rydberg Atoms and Molecules, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Apr. 2001.

"Measurements of Low Temperature Dielectronic Recombination in L-Shell Iron for Modeling X-Ray Photoionized Cosmic Plasmas," 12th APS Topical Conference on Atomic Processes in Plasmas, Reno, NV, Mar. 2000.

"Modeling X-Ray Photoionized Plasmas: Ion Storage Ring Measurements of Low Temperature Dielectronic Recombination Rate Coefficients for L-Shell Iron," Atomic Data Needs for X-Ray Astronomy, Goddard Space Flight Center, Greenbelt, MD, Dec. 1999.

"Dielectronic Recombination: An Overview of Theory and Experiment and Some Astrophysical Implications," Astrophysical Plasmas: Codes, Models, and Observations, Mexico, City, Mexico, Oct. 1999.

"Ion Storage Ring Measurements of Dielectronic Recombination for Astrophysically Relevant Fe^{q+} Ions," 15th International Conference on the Application of Accelerators in Research and Industry, Denton, TX, Nov. 1998.

"Ion Storage Ring Measurements for Understanding Line Emission and Ionization and Thermal Structures of Photoionized Gas," NASA Laboratory Space Science Workshop, Cambridge, MA, Apr. 1998.

"The Effects of Electron Spiraling on the Anisotropy and Polarization of Photon Emission from an Electron Beam Ion Trap," International Seminar on Plasma Polarization Spectroscopy, Kyoto, Japan, Jan. 1998.

"Measurements of Dielectronic Recombination for Astrophysics," Workshop on Ion-Electron Collisions in Storage Rings, Heidelberg, Germany, Dec. 1997.

""Laboratory Astrophysics: Measurements of $n = n'$ to $n = 2$ Line Emission in Fe^{16+} to Fe^{23+}," 10th APS Topical Conference on Atomic Processes in Plasmas, San Francisco, CA, Jan. 1996.

"Low Temperature Dielectronic Recombination Measurements for Astrophysics," Rates, Codes, and Astrophysics Workshop, AXAF Science Center, Cambridge, MA, Jul. 1995.

"Atomic Data Needs for X-Ray Astronomy", American Astronomical Society, High Energy Astrophysics Division Meeting, Napa, CA, Nov. 1994.

Invited Colloquia and Seminars

Stockholm University, Stockholm, Sweden, Nov. 2011.
American Museum of Natural History, New York, NY, May 2011.
Weizmann Institute of Science, Rehovot, Israel, Jan. 2011.
Tel Aviv University, Jan. 2011.
Technion University, Haifa, Israel, Jan. 2011.
Columbia University, New York, NY, Sep. 2010.
Charles University, Prague, Czech Republic, May 2010.
Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Apr. 2010.
University of Nevada, Reno, NV, Jan. 2010.

Université Catholique de Louvain, Louvain-la-Neuve, Belgium, Oct. 2009.
Technion University, Haifa, Israel, Dec. 2006.
University of Giessen, Giessen, Germany, Dec. 2006.
Tokyo Metropolitan University, Japan, Apr. 2006.
International Christian University, Tokyo, Japan, Apr. 2006.
Institute of Space and Astronautical Science, Japanese Aerospace Exploration Agency, Tokyo, Japan, Apr. 2006.
University of Wisconsin, Madison, WI, Feb. 2006.
Air Force Research Laboratory, Hanscom Air Force Base, MA, Sep. 2005.
University of Nebraska, Lincoln, NE, Sep. 2005.
Charles University, Prague, Czech Republic, Mar. 2005.
University of Wisconsin, Madison, WI, Feb. 2005.
University of Tennessee, Knoxville, TN, Feb. 2005.
University of Georgia, Athens, GA, Feb. 2005.
Stockholm University, Sweeden, Apr. 2004.
Technion University, Haifa, Israel, Jun. 2003.
Tel Aviv University, Israel, May 2003.
University of Toledo, Toldedo, OH, Nov. 2002.
College of William and Mary, Williamsburg, VA, Apr. 2002.
Observatoire de Paris-Meudon, France, Jan. 2002.
Wesleyan University, Middletown, CT, Nov. 2001.
University of Connecticut, Storrs, CT, Nov. 2001.
University of Georgia, Athens, GA, Oct. 2001.
Oak Ridge National Laboratory, Oak Ridge, TN, Apr. 2001.
National Institute for Fusion Science, Toki, Japan, Mar. 2001.
University of Oklahoma, Norman, OK, Feb. 2001.
Appalachian State University, Boone, NC, Nov. 2000.
Naval Research Laboratory, Washington, DC, Aug. 2000.
National Institute of Standards and Technology, Gaithersburg, MD, Aug. 2000.
Ohio State University, Columbus, OH, Apr. 2000.
University of Kentucky, Lexington, KY, Mar. 2000.
Auburn University, Auburn, AL, Nov. 1999.
Georgia State University, Atlanta, GA, Nov. 1999.
Max Planck Institute for Plasma Physics, Berlin, Germany, May 1999.
Max Planck Institute for Nuclear Physics, Heidelberg, Germany, Apr. 1999.
Max Planck Institute for Astronomy, Heidelberg, Germany, Apr. 1999.
University of Wisconsin, Madison, WI, Feb. 1999.
Western Michigan University, Kalamazoo, MI, Feb. 1999.
Weizmann Institute of Science, Rehovot, Israel, Nov. 1998.
Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Aug. 1997.
Max Planck Institute for Nuclear Physics, Heidelberg, Germany, Apr. 1996.
University of Nevada, Las Vegas, NV, Mar. 1996.
Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, Apr. 1995.
University of Kentucky, Lexington, KY, Feb. 1995.
Oak Ridge National Laboratory, Oak Ridge, TN, Feb. 1995.
Lawrence Livermore National Laboratory, Livermore, CA, Feb. 1993.
Naval Research Laboratory, Washington, DC, Feb. 1993.
National Institute of Standards and Technology, Gaithersburg, MD, Feb. 1993.

Press Interviews

"Columbia University's Daniel Wolf Savin describes the chemistry underlying early star formation," National Science Foundation Press Conference, Jun. 30, 2010.

Lectures for the General Public and High Schools

State University of New York, Astronomy Lecture and Star Gazing, Newburgh, NY, Sep. 23, 2011.
Picnic Café, Café Science, Manhattan, NY, Aug. 8, 2011.
Hudson River Museum, Science Sunday, Yonkers, NY, Mar. 27, 2011.
New Rochelle High School Research Class, New Rochelle, NY, Jan. 19, 2011.
Columbia University, Department of Astronomy Public Outreach Lecture, New York, NY, Dec. 3, 2010.
Curtis High School, Junior and Senior Physics Classes of Ms. Alia Davis, Staten Island, NY, Oct. 2, 2009.

Radio Interviews for the General Public

On "You'd Prefer an Astronaut," Vassar College Radio (http://astroshow.blogspot.com/). The interview is at http://astroshow.blogspot.com/2007/12/interview-with-dr-savin.html

Science Articles for the General Public

"Cosmic Code Breakers", D. W. Savin, B. J. McCall, and K. Kirby, Australian Sky & Telescope, August/September 2009, p. 36.
"Fare Astrophysica in Laboratorio (Doing Astrophysics in the Laboratory)," D. W. Savin, B. J. McCall, and K. Kirby, Le Stelle (The Stars), Luglio 2007 (July 2007), p. 40, (in Italian).
"Kosmoische Kryptologie (Cosmic Cryptogrophy)," D. W. Savin, B. J. McCall, and K. Kirby, Astronomie Heute (Astronomy Today), Juni 2007 (June 2007), p. 28, (in German).
"Cosmic Codebreakers: Unraveling the Mysteries of the Universe," D. W. Savin, B. J. McCall, and K. Kirby, Sky & Telescope, March 2007, p. 33.

Courses Taught

Spring 2009 Stellar Structure and Evolution (Astronomy C3101y), Columbia University, Junior level undergraduate class.

Undergraduates Mentored

Alex Olivas (Physics, University of California, Berkeley, Fall 1994).
Simone Höck (Physics, University of Tübigen, Germany, Summer 2009).
Ryan Mandelbaum (Physics, Columbia University, Summer 2010).
Jose Luis Montelongo (Astronomy, Columbia University, Fall 2011-present).
Warit Mitthumsiri (Physics, Columbia University, Summer 2004 - Spring 2007).
Hillel Rubinstein (Physics, Weizmann Institute of Science, Rehovot, Israel, Summer 2003).
Benjamin L. Schmitt (Physics and Astronomy, University of Rochester, Summer 2008).

Adam Shapiro (Physics, Columbia University, Spring 1999).

Graduate Students Mentored

Anthony Mroczkowski (Astronomy, Columbia University, Second Year Project, 2001-2002).

Ph.D. Thesis Defense Committees

Michael R. Fogle, Jr. (Physics, Stockholm University, 04/2004).
Xabier Sarasola Martin (Applied Physics and Applied Mathematics, Columbia University, 05/2011).

Postdoctoral Scientists Mentored

Julian Berengut (visiting from University of New South Wales, 09/2007-04/2008)
Hjalmar Bruhns (Columbia University, 07/2006-12/2008).
Paul Bryans (Columbia University, 10/2005-09/2008).
Mauricio Garrido (Columbia University, 07/2010-07/2011).
Michael Hahn (Columbia University, 05/2009-present).
Holger Kreckel (Columbia University, 03/2007-01/2009).
Duck-Hee Kwon (visiting from Korea Atomic Energy Research Institute, 09/2009-01/2011).
Michael Lestinsky (Columbia University, 07/2007-06/2010).
Dragan Lukić (Columbia University, 02/2005-08/2007).
Kenneth A. Miller (Columbia University, 11/2008-present).
Oldřich Novotný (Columbia University, 07/2009-present).
Aodh O'Connor (Columbia University, 04/2010-present).
Michael Schnell (Columbia University, 04/2004-03/2006).
Bohdan Seredyuk (Columbia University, 02/2006-12/2007).
Julia Stützel (Columbia University, 07/2011-present).

High School Science Teacher Fellows Mentored

Alia Davis (Curtis High School, Staten Island, NY, Summers 2009 and 2010).
Bruce Zeller (New Rochelle High School, New Rochelle, NY, Summer 2011).

High School Students Mentored

Jesse Voremberg (Heschel High School, New York NY, Summer 2010).

III. Administrative Experience

University Service

2005-2007	Alumni Relations Committee, Columbia University Senate, Member.
2005-present	Budget Review Committee, Columbia University Senate, Member.
2005-present	Structure and Operations Committee, Columbia University Senate, Member.
2004-2005	Honors & Prizes Committee, Columbia University Senate, Member.
2004-2005	External Relations & Research Policy Comm., Columbia Univ. Senate, Member.
2004-present	Research Officers Committee, Columbia University Senate, Chair.
2003-2004	Researcher Officers Committee, Columbia University Senate, Member.
2003-present	Columbia University Senate, Senator.
2001-2002	Ad Hoc Researchers' Committee of the Columbia University Senate, Member.

Presentations to National Advisory Committees

04/2007	National Academy of Science, Plasma Science Committee, Washington, DC, "Report on the 2006 NASA-Sponsored Laboratory Astrophysics Workshop".
11/2006	National Academy of Sciences, Committee on Astron. and Astrophys., Irvine, CA, "Report on the 2006 NASA-Sponsored Laboratory Astrophysics Workshop".
11/2006	American Physical Society, Physics Policy Committee, Washington, DC, "Report on the 2006 NASA-Sponsored Laboratory Astrophysics Workshop".
11/2006	Board on Physics and Astronomy, National Academy of Sciences, Irvine, CA, "Report on the 2006 NASA-Sponsored Laboratory Astrophysics Workshop".

Service on International Bodies

2009-present	International Conference on Photonic, Electronic, and Atomic Collisions, General Committee, Member.

Service on National Bodies

2011-present	American Astronomical Society, Working Group on Laboratory Astrophysics, Chair.
2009	American Physical Socieity, Division of Atomic, Molecular, and Optical Physics, Program Committee, Subcommittee Chair.
2008-2011	American Physical Socieity, Division of Atomic, Molecular, and Optical Physics, Program Committee, Member.
2007-2008	Constellation-X Facility Science Team, Panel on Plasma Diagnostics and Atomic Astrophysics.
2007-present	American Astronomical Society, Working Group on Laboratory Astrophysics, Member.
2003-2011	South East Laboratory Astrophysics Consortium, Executive Committee Member.

Conference Organizing Committees and Service

06/2011	American Physical Society, Division of Atomic and Molecular Physics, Session Chair (Recent Advances in Collision Studies).
05/2010	American Physical Society, Division of Atomic and Molecular Physics, Session Organizer and Chair (Atomic and Molecular Physics in the Early Universe).
10/2010	NASA-sponsored 2010 Laboratory Astrophysics Workshop, Science Organizing Committee, Chair.
08/2010	Eighth International Conference on Dissociative Recombination: Theory, Experiments & Applications, Session Chair.
05/2010	American Astronomical Society, Meeting within a Meeting Co-Organizer (Bridging Laboratory and Astrophysics: Frontiers in Plasma Astrophysics).
01/2010	American Astronomical Society, Special Session Organizer and Chair, (Planetary Cosmetology).
05/2009	American Physical Society, Division of Atomic and Molecular Physics, Session Organizer and Chair, (Breakthroughs in Molecular Physics).
06/2008	American Astronomical Society, Topical Session Co-Organizer, (Bridging Laboratory and Astrophysics).
05/2008	American Physical Society, Division of Atomic and Molecular Physics, Session Organizer and Chair, (The Molecular Basis of Astrobiology).
02/2008	Atomic Ion Stage Abundances in Astrophysical Plasmas, South East Laboratory Astrophysics Workshop, Science Organizing Committee and Local Organizing Committee.
04/2006	US-Japan Symposium on Collision-Induced X-Ray Emission and Antimatter Physics, Session Chair.
02/2006	NASA Laboratory Astrophysics Workshop 2006, Science Organizing Committee and Session Chair.
06/2005	American Astronomical Society, Topical Session Co-Organizer and Session Chair (Highlights in Laboratory Astrophysics: Bringing Together Users and Providers).
10/2004	Joint Meeting of the 14th International Toki Conference on Plasma Physics and Controlled Nuclear Fusion and the 4th International Conference on Atomic and Molecular Data and Their Applications, Session Chair (Astrophysics).
06/2004	Solar Physics Division and American Astronomical Society Joint Meeting, Topical Session Organizer and Chair (Improving Our Understanding of Solar and Stellar Coronae: Recent Efforts in Atomic Physics).
06/2003	South East Laboratory Astrophysics Workshop, Science Organizing Committee (SOC) Member, and Session Co-convener (X-ray/EUV Working Group).
11/2000	Photoionized Plasmas 2000, SOC Member, and Session Chair (Basic Atomic/Molecular Processes).

Grant Proposals Reviewed

Numerous grant proposals reviewed for the following agencies and programs:

Department of Energy Opportunities in Basic Plasma Science.
Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) Priority Program (Schwerpunktprogramm, SPP) on the physics of the interstellar medium.
European Research Council Starting Grant Program

PPARC (the UK Particle Physics and Astronomy Research Council).
NASA Astronomy and Physics Research and Analysis Program.
NASA Astrophysics Theory Program/Beyond Einstein Foundation Science.
NASA Herschel Theoretical Research and Laboratory Astrophysics Programs.
NASA Heliophysics Research Program.
NASA Sun-Earth Connection Program.
NASA Planetary Atmospheres Program.
NASA Postdoctoral Program.
NSF Division of Atmospheric and Geospace Sciences: Solar, Heliospheric, and INterplanetary Environment (SHINE) Program.
NSF Graduate Research Fellowship Program.
NSF Division of Physics: Major Research Instrumentation Program.

Reviews for Journal and Encyclopedia Articles

Served as referee for the following journals and publications:

Astronomical Journal
Astronomy and Astrophysics
Canadian Journal of Physics
Journal of Plasma and Fusion Research Series
Journal of Physics: Conference Series
Journal of Quantitative Spectroscopy and Radiative Transfer
The Astrophysical Journal Letters
The Astrophysical Journal
The Astrophysical Journal Supplemental Series
Physical Review A
Physical Review Letters
Reports on Progress in Physics
Review of Modern Physics
Wiley Encyclopedia of Electrical and Electronic Engineering

IV. Publications

Books

Spectroscopic Challenges of Photoionized Plasmas, ed. G. J. Ferland and **D. W. Savin**, (Astronomical Society of the Pacific, Provo, Utah, 2001).

Book Chapters

"Negative Hydrogen Chemistry in the Early Universe", H. Kreckel and **D. W. Savin**, in *Modern Concepts in Laboratory Astrochemistry*, ed. S. Schlemmer, H. Mutschke, and Th. Giesen, (Wiley, Weinheim, Germany, in press).

Refereed Publications

72. "Associative detachment of $H^- + H \rightarrow H_2 + e^-$", K. A. Miller, H. Bruhns, J. Eliášek, M. Čížek, H. Kreckel, X. Urbain, and **D. W. Savin**, Phys. Rev. A, **84**, 052709 (2011).

71. "Differential Emission Measure Analysis of a Polar Coronal Hole During the Solar Minimum in 2007", M. Hahn, E. Landi, and **D. W. Savin**, Astrophys. J. **736**, 101 (2011).

70. "Storage Ring Cross Section Measurements for Electron Impact Ionization of Fe^{12+} Forming Fe^{13+} and Fe^{14+}", M. Hahn, M. Grieser, C. Krantz, M. Lestinsky, A. Müller, O. Novotný, R. Repnow, S. Schippers, A. Wolf and **D. W. Savin** Astrophys. J. **735**, 105 (2011).

69. "Effects of Configuration Interaction for Dielectronic Recombination of Na-like Ions Forming Mg-like Ions", D.-H. Kwon and **D. W. Savin**, Astrophys. J. **734** 2 (2011).

68. "Storage Ring Cross Section Measurements for Electron Impact Ionization of Fe^{11+} Forming Fe^{12+} and Fe^{13+}", M. Hahn, D. Bernhardt, M. Grieser, C. Krantz, M. Lestinsky, A. Müller, O. Novotný, R. Repnow, S. Schippers, A. Wolf, and **D. W. Savin**, Astrophys. J. **729**, 76 (2011).

67. "Dielectronic recombination of xenonlike tungsten ions", S. Schippers, D. Bernhardt, A. Müller, C. Krantz, M. Grieser, R. Repnow, A. Wolf, M. Hahn, O. Novotný, and **D. W. Savin**, Phys. Rev. A **83**, 012711 (2011).

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