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HONORS AND AWARDS

- Group Achievement Award, NASA, 2009, presented “for contributions to the Cassini/Huygens Mission”
- Group Achievement Award, NASA, 2002, presented “for contributions to the DS1 flyby of comet 19P/Borrelly.”
- Group Achievement Award, NASA, 1999, presented **"in recognition of the successful completion of MICAS, the highly innovative, multipurpose miniature integrated camera-spectrometer that spans the wavelength range from the ultraviolet to infrared"**
- Group Achievement Award, NASA, 1999, presented **"for outstanding contributions to science on the Deep Space One mission"**
- Group Achievement Award, NASA, 1998, presented **"in recognition of the innovative design, development, integration, and test of the Cassini Ion and Neutral Mass Spectrometer instrument"**
- Harold C. Urey Prize, Division of Planetary Science of the American Astronomical Society, 1993, presented for **"outstanding contributions to Planetary Science by a young scientist"**
- Group Achievement Award, NASA, 1990, presented **"in recognition of the outstanding achievements of the Voyager science investigations."**
- Editor's Citation, American Geophysical Union, 1989, for **"Excellence in Refereeing."**

SPACECRAFT EXPERIENCE

- Voyager, Ultraviolet Spectrometer, Team Member, 1985-1989
- Cassini, Ion Neutral Mass Spectrometer, Team Member, 1992-2017
- Champollion, CIRCLE Experiment, **Principle Investigator**, 1995-1999
- Deep Space 1, MICAS, Team Member, 1997-2000
- Venux Express, VEX Accelerometer Experiment, Team Member
- MAVEN, Co-Investigator, 2008-2015

EDUCATION

Department of Physics University of Wisconsin	Ph.D., 1984, M.S. 1980
Department of Physics Worcester Polytechnic Institute	B.S., 1978

ACADEMIC APPOINTMENTS

Department of Planetary Sciences University of Arizona	Full Professor January 2001 to Present
Visiting Professor, University Joseph Fourier, Grenoble, France	September – December, 2008
Department of Physics and Astronomy Northern Arizona University	Associate Professor September 1999 to December 2000
Astronomy Department Boston University	Associate Professor September 1995 to September 1999
NASA Ames Research Center	Senior NRC Fellow September 1994 to September 1995
Space Telescope Science Institute	Visiting Scientist May 1994 to August 1994
Lunar and Planetary Laboratory University of Arizona	Assistant Research Scientist July 1989 to September 1995 Senior Research Associate July 1988 to July 1989 Research Associate November 1984 to July 1988
Physics Department University of Wisconsin-Madison	Research Assistant September 1982 to November 1984 June 1979 to June 1980 Teaching Assistant September 1978 to June 1979
Plasma Physics Laboratory Princeton University	Professional Staff June 1980 to September 1982

PROFESSIONAL SOCIETIES

American Geophysical Union, American Astronomical Society, European Geophysical Society

PROFESSIONAL ACTIVITIES

Neptune Atmospheric Science Working Group, Voyager Project, 1987 - 1989.
Neptune - Triton International Conference, Organizing Committee Member, 1990 - 1992.
Cassini/Huygens Titan Atmosphere Modelling Group, 1992.

Atmospheric Science Working Group, Cassini Project, 1992 -
 NASA Outer Planets Science Working Group (OPSWG), 1991 - 1996
 Icarus Editorial Board, 1993 - 1995.
 National Research Council Committee on Planetary and Lunar Exploration (COMPLEX),
 1994-1996.
 Visiting Member, Dissertation Committee for L. Young, M.I.T., 1994
 NASA Planetary Atmosphere Review Panel, 1994.
 HST Telescope Allocation Committee, 1994.
 NASA Solar System Building Blocks Campaign Working Group, 1996
 Pluto Express Science Definition Team, 1995
 Member, NASA Delegation to Russian Space Agency on behalf of Pluto Express
 Mission, 1996
 NASA Solar System Roadmap Committee, 1996
 International Commission on Planetary Atmospheres and their Evolution, 1996-1999
 NASA Astrophysical Analogs Campaign Working Group, 1996-1998
 Clementine II Science Definition Team, 1997
 Deep Space 4 Science Definition Team, 1997-1999
 NASA Planetary Atmospheres Review Panel, 1997
 NASA Chemical Building Blocks Campaign Working Group, 1997-1999
 NASA Planetary Atmospheres Review Panel 1998
 NASA Task Force on the Availability and Usefulness of Space Data, 2001
 Titan Aeronomy Worksop, Observatoire de Paris, Jan 7-9, 2004, Principle Organizer
 Titan Workshop, Heraklion, Crete (2005) (one of 3 principle organizers)
 DPS Committee Member 2005-2008.
 NASA Planetary Atmospheres review panel, 2006
 Royal Society Discussion: Titan Atmosphere and Space Environment, December 2007,
 (one of 3 principle organizers)
 Guest Editor for Transactions of the Royal Society, 2008.
 NASA Planetary Atmospheres review panel, 2008.
 NASA Planetary Atmospheres review panel, 2009.
 Titan Atmosphere Model Working Group, Chairperson, (Cassini/Huygrns Project) 2000-
 2011

RESEARCH GRANTS

"Exospheric Line Shape Measurements with a Fabry-Perot ICCD Interferometer," NSF
 Grant No. ATM-8521515, Co-Principal Investigator, 1985-1987.
 "Scientific Program in Planetary Atmosphere Studies," A. L. Broadfoot, P.I., NASA
 Grant No. NAGW-610, Co-Investigator, 1986-1991.
 "An Investigation of the EUV Albedo and Hydrocarbon Photochemistry on Uranus,"
 NASA Grant No. NAGW-1181, Principal Investigator, 1987-1990.
 "A Study of Lyman Alpha Emissions from Uranus," NASA Grant No. NAGW-1207,
 Principal Investigator, 1987-1990.
 "Theory of Auroras on the Outer Planets," Bill R. Sandel, P. I., NASA Grant No. NAG8-
 110, Co-Investigator, 1988-1989.

- "Non-LTE Models of the Mesospheres of the Outer planets and their Satellites," NASA Grant No. NAGW 2017, Principal Investigator, 1989-1995.
- "Interpretation of Voyager UVS Observation of Occultations by the Atmosphere of Neptune," Bill R. Sandel, P.I., NASA Grant, No. NAGW- 2441, Co-Investigator, 1990-1993.
- "Interpretation of Voyager UVS Observation of Occultations by the Atmosphere of Neptune," Bill R. Sandel, P.I., NASA Grant, No. NAGW-2441, Co-Investigator, 1990-1993.
- "Analysis of the EUV Dayglow Spectra of Triton, Titan, and Earth," NASA Grant, No. NAGW-2360, Principal Investigator, 1990-1993.
- "Analysis of the EUV Dayglow Spectra of Triton, Titan, and Earth," NASA Grant, No. NAGW-2360, Principal Investigator, 1990-1993.
- "Determination of Stratospheric Thermal Structure and Methane Abundance from Voyager and Ground-Based Data," NASA Grant, No. NAGW-2537, Principal Investigator, 1990-1993.
- "Hubble Space Telescope Observations of Neptune and Uranus," Melissa McGrath (Johns Hopkins University), P.I., Space Telescope Science Institute Grant GO3616.03-91A, Co-Investigator, 1992-1993.
- Ion-Neutral Mass Spectrometer Experiment for Cassini Mission to Saturn, Team Member, 1992-2006.
- "Analysis of Voyager Occultation Measurements of the Atmospheres of Titan and Triton," NASA Grant, No. NAGW-0000, Principal Investigator, 1993.
- "Development and Testing of a Pluto Integrated Camera Spectrometer Ultraviolet Spectrometer Channel," JPL Project No. 959765, Principal Investigator, 1993-1994.
- 'UV Observations of the Impact of Comet SL9 with Jupiter,' Keith Noll (STScI), P.I., Space Telescope Science Institute, 1994-1995.
- "Consequences of the Shoemaker-Levy Impact with Jupiter," Melissa McGrath (STScI), P.I., Space Telescope Science Institute, Co-Investigator, 1995-1996.
- "Continued Studies of Atmospheric Thermal Structure in the Outer Solar System," NASA's Planetary Atmospheres Program, NAGW-4693, Principal Investigator, 1995-2004.
- "Chemical Consequences of Comet Shoemaker-Levy 9," Space Telescope Science Institute, Director's Discretionary Program, Principal Investigator, 1995.
- "Chemical Consequences of Comet Shoemaker-Levy 9, NASA Planetary Atmospheres Program, NAGW-, Principal Investigator, 1995.
- "Champion Infrared Spectrometer and Camera Lander Experiment (CIRCLE)", Deep Space 4 Mission, Principal Investigator, 1995-1999.
- "Miniature Integrated Camera and Spectrometer (MICAS) UV Channel, for the Deep Space 1 Mission, Principal Investigator, 1996-1997.

- New Millenium Program Deep Space One Science Team, JPL Subcontract, Team Member, 1997-2000.
- “Analysis of FOS Spectra of Jupiter,” Space Telescope Science Institute, Principal Investigator, 1998.
- “Comparison of the Atmospheres of Titan and Earth,” NSF grant, Principal Investigator, 1999-2000.
- “STIS Spectra of Outer Planet Atmospheres” Space Telescope Science Institute, Principal Investigator, 2000
- “Structure and Composition of Planetary Atmospheres” NASA Planetary Atmospheres Program, Principle Investigator 2000-2002
- “Structure and Dynamics of the Inner Coma of Comet 19P/Borrelly,” NASA Discovery Program, Principle Investigator 2003-2005.
- “Labotatory Simulations of Titan’s Ionosphere,” NASA Cassini Data Analysis Program, Principle Investigator, 2007-2008
- “Investigations of Titan’s Agnostosphere, : NASA Cassini Data Analysis Program, Principle Investigator, 2009-2010
- “Analysis and Interpretation of SPICAM Measremments of O2 in the Martian Atmosphere,” NASA Mars Data Analysis Program, Principle Investigator, 2009-2012.
- “Titan as a Pre-biotic Laboratory,” NASA Astrobiology Institute, Co-Investigator, 2009-2013.
- “Chemistry, Dynamics, and Thermal Structure of Titan’s Upper Atmosphere,” NASA Planetary Atmospheres Program, Principle Investigator 2001-20012

INVITED LECTURES AND REVIEW TALKS

- "Fluorescence of Sunlight in Upper Atmospheres of Jupiter, Saturn, and Uranus," lecture presented to the Department of Physics and Astronomy, May 1987, University of Iowa, Iowa City, Iowa.
- "Aeronomy of Outer Planet Atmospheres," invited lecture presented to Geophysical Institute, November 1987, University of Alaska, Fairbanks, Alaska.
- "Ultraviolet Spectra and Related Aeronomy of the Outer Planets," invited review presented at AGU Fall Meeting, November 1987, San Francisco, California.
- "Triton Ultraviolet Spectroscopy: Lower Atmospheric Structure and Constituents," invited review presented at AGU Fall Meeting, November 1989, San Francisco, California.
- "Cryogenic Atmospheres of Pluto and Triton," invited lecture presented to the Department of Astrophysics, Planetary and Atmospheric Sciences, March 1990, University of Colorado, Boulder, Colorado.

- "Cryogenic Atmospheres of Pluto and Triton," invited lecture presented to Institute for Terrestrial and Planetary Atmospheres, March 1990, State University of New York, Stonybrook, New York.
- "Structure and Compositions of Triton's Atmosphere," invited review presented at Symposium on Neptune after Voyager, COSPAR, July 4, 1990, The Hague, The Netherlands.
- "Thermal Balance, Photochemistry, and Evolution of Titan's Atmosphere," invited lecture to Department of Space Physics and Astronomy, Rice University, March 24, 1991, Houston, Texas.
- "Thermal Balance, Photochemistry, and Evolution of Titan's Atmosphere," invited lecture at Harvard-Smithsonian Center for Astrophysics, March 29, 1991, Cambridge, Massachusetts.
- "Thermal Balance, Photochemistry, and Evolution of Titan's Atmosphere," invited lecture in Theoretical Astrophysics Seminar Series, April 10, 1991, University of Arizona, Tucson, Arizona.
- "Atomic and Molecular Data Needed for Upper Atmospheric Research," invited review presented at IAU Colloquia 65, July 25, 1991, Buenos Aires, Argentina.
- "Volatile Transport and Lower Atmospheric Structure on Triton," invited review presented at Neptune and Triton Conference, January 10, 1992, Tucson, Arizona.
- "What Triton Can Tell Us About Pluto's Atmosphere," invited lecture presented at AGU Spring Meeting, May 1992, Montreal, Quebec.
- "Thermal Structure and Chemistry of Titan's Upper Atmosphere," presented November 10, 1992, at NASA Goddard Space Flight Center, Greenbelt, Maryland.
- "Pluto's Atmosphere: Structure and Composition," invited review presented at International Pluto Conference, July 1993, Flagstaff, AZ.
- "Pluto's Atmosphere: Where It Comes From and Where It's Going," Urey Prize lecture presented at DPS Meeting, October 20, 1993, Boulder, Colorado.
- "Pluto's Atmosphere: Where It Comes From and Where It's Going," invited lecture to Department of Astronomy, University of California at Berkeley, March 9, 1994, Berkeley, CA.
- "Surface-Atmosphere Interactions on Pluto," invited lecture presented at International Conference on Laboratory Measurements for Planetary Atmospheres, AAS/DPS, November 1994, Bethesda MD
- "Chemical Consequences of the Impact of Comet Shoemaker-Levy with Jupiter," invited lecture to NASA/Ames Research Center Space Science Division, December 1994, Moffett Field, CA.
- "Chemical Consequences of the Impact of Comet Shoemaker-Levy with Jupiter," invited lecture to Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, April 1995, Cambridge MA.

- "Chemical Consequences of the Impact of Comet Shoemaker-Levy with Jupiter," invited lecture to Department of Astronomy, Boston University, April 1995, Cambridge MA.
- "Shoemaker-Levy Chemistry: Theory", presented at IAU Colloquium 156, Space Telescope Science Institute, May 1995, Baltimore MD
- "The New Pluto," presented to The Institute for Astronomy, University of Hawaii, May 1995, Honolulu, Hawaii.
- "Chemical Consequences of Shoemaker-Levy 9: Results from HST," invited lecture to Lunar and Planetary Institute, September 1995, Houston, Texas.
- "Titan's Thermal Structure - What Do We Want Cassini to Tell Us?," invited paper at European Geophysical Society meeting, April 1997, Vienna, Austria.
- "Jupiter's Upper Atmosphere," presented to Lowell Observatory, May 1997, Flagstaff, Arizona.
- "Energetics of Jupiter's Upper Atmosphere," presented to Dept. of Astronomy, New Mexico State University, April 1998, Las Cruces, New Mexico.
- "Thermal Structure and Composition of Giant Planet Upper Atmospheres," invited review presented at Yosemite2000, "Comparative Aeronomy in the Solar System," 9 February 2000, Yosemite National Park, CA.
- "Titan's Upper Atmosphere," invited review at COSPAR conference, Warsaw Poland, July 2000.
- "Gravity Waves and Energy Balance in Jupiter's Upper Atmosphere," presented to Earth and Planetary Science Department, University College London, August 2000.
- "Energetics, Chemistry, and Dynamics of Titan's Upper Atmosphere," presented to Planetary Sciences Department, University of Arizona, Tucson, AZ, May 2001.
- "Jupiter's Upper Atmosphere," invited review at the Jupiter Conference, Boulder, CO, June 2001
- "The Scientific Promise of Pluto," presentation of NAS Primitive Bodies Solar System Exploration Decadal Study Panel, Woods Hole, MA, August 2001
- "Chemistry of Titan's Upper Atmosphere," invited review at the IAGA conference, Hanoi Vietnam, August 2001
- "Disequilibrium Processes in Extra-Solar Planet Atmospheres," presented to Dept of Engineering Physics, University of Virginia, April 2002.
- "Overview of Cassini Ion Neutral Mass Spectrometer Results" Invited paper presented to IAMAS conference, Beijing, China, July 2005.
- "Aeronomy of Extra-solar Giant Planets" invited review presented to the 3rd International TPF/Darwin Workshop, Pasadena, CA, November 2006.
- "A Brief and Partial Summary of New Knowledge of Titan's Upper Atmosphere Obtained from the Very Small Number of Atmosphere Oriented Cassini Encounters with Titan to Date" invited paper presented at the 18th Rencontres de Blois on Planetary Science, Blois France, June 2006.

- Aeronomy of Titan: Preliminary Cassini Results” presented to the Center for Space Physics, Boston University, April 2007.
- “Aeronomy of Titan: Preliminary Cassini Results” presented to Laboratoire de Planetologie, University Joseph Fourier, Grenoble, France July 2007.
- “The Dynamics of Titan’s Thermosphere” Invited Review at Royal Society Discussion Meeting: Titan Atmosphere and Space Environment, December 2007.
- “Escape of Titan’s Atmosphere”, presented to Laboratory of Atmospheric, Space, and Planetary Science, University of Colorado, Boulder, Feb 2008.
- “Results from the Cassini Mission,” Public Lecture, University Joseph Fourier, Grenoble, France, Nov, 2008.
- “Benzene Formation in Titan’s Upper Atmosphere,” invited talk at 3rd Titan Chemistry Symposium, San Juan Puerto Rico, March 2009.
- “What Cassini has Taught us about Titan Chemistry,” invited colloquium, Dept. of Planetary Sciences, University of Arizona, Tucson, AZ, March 2009.
- “Titan Ion Chemistry” Invited Lecture, Faraday Discussion on Titan Chemistry, Abbaye de St. Jacut, June, 2010.

BIBLIOGRAPHY

- 1) R. J. Fonck, A. T. Ramsey, R. V. Yelle, Multichannel Grazing Incidence Spectrometer for Plasma Impurity Diagnosis: SPRED, *Appl. Optics*, 21, 12, 2115, 1982.
- 2) R. J. Fonck, M. Bol, K. Brau, H. F. Dylla, M. Finkenthal, R. Goldstein, B. Grek, R. Hawryluk, D. Johnson, R. Hulse, R. Kaita, S. Kaye, H. Kugel, D. Manos, K. Mcquire, K. Oasa, M. Okabayashi, D. K. Owens, J. Ramette, M. Reusch, G. Schmidt, S. Senic, S. Suckewer, H. Takahashi, F. Tenney, P. Thomas and R. V. Yelle, Impurity Levels and Power Loading in the PDX Tokamak with High Power Neutral Beam Injection, *J. of Nuc. Mat.*, 111, 112, 353, 1982.
- 3) R. V. Yelle and F. L. Roesler, Geocoronal Balmer Alpha Line Profiles and Implications for the Exosphere, *J. Geophys. Res.*, 90, 7568, 1985.
- 4) R. V. Yelle, B. R. Sandel, D. E. Shemansky, and A. L. Broadfoot, The Altitude Variation of EUV Emissions and Evidence for Proton Precipitation at Low Latitudes in the Saturnian Atmosphere, *J. Geophys. Res.*, 91, 8756, 1986.
- 5) R. V. Yelle and B. R. Sandel, Uranian H Ly- α Emissions: The Interstellar Wind Source, *Geophys. Res. Letters*, 13, 1, 1986.
- 6) A. L. Broadfoot, F. Herbert, J. B. Holberg, D. M. Hunten, S. Kumar, B. R. Sandel, D. E. Shemansky, G. R. Smith, R. V. Yelle, D. F. Strobel, H. W. Moos, T. M. Donahue, S. K. Atreya, J.-L. Bertaux, J. E. Blamont, J. C. McConnell, A. J. Dessler, S. Linick, R. Springer, Ultraviolet Spectrometer Observations of Uranus, *Science*, 233, 74, 1986.
- 7) F. Herbert, B. R. Sandel, R. V. Yelle, J. B. Holberg, A. L. Broadfoot, D. E. Shemansky, S. K. Atreya, and P. N. Romani, The Upper Atmosphere of Uranus: EUV Occultations Observed by Voyager 2, *J. Geophys. Res.*, 92, 15093, 1987.

- 8) R. V. Yelle, L. R. Doose, M. G. Tomasko, and D. F. Strobel, Analysis of Raman Scattered Ly- α Emissions from the atmosphere of Uranus, *Geophys. Res. Letters*, 14, 483, 1987.
- 9) R. V. Yelle, J. C. McConnell, B. R. Sandel, A. L. Broadfoot, The Dependence of Electroglow on the Solar Flux, *J. Geophys. Res.*, 92, 15110, 1987.
- 10) J. H. Waite, M. Chandler, R. V. Yelle, B. R. Sandel, and T. Cravens, Suprathermal Electron Processes in the Upper Atmosphere of Uranus: Aurora and Electroglow, *J. Geophys. Res.*, 93, 14295, 1988.
- 11) R. V. Yelle, A New Approach to Resonance Line Scattering in Planetary Atmospheres, *Ap. J.*, 332, 514, 1988.
- 12) R. V. Yelle, H₂ Emissions from the Outer Planets, *Geophys. Res. Letters*, 15, 1145, 1988.
- 13) J. T. Clarke, J. Caldwell, T. Skinner, and R. V. Yelle, The Aurora and Airglow of Jupiter, in "*Time Variable Phenomenon in the Jovian System*," M. Belton, et al., Editors, NASA SP-494, 1989.
- 14) R. V. Yelle, J. C. McConnell, D. F. Strobel, and L. R. Doose, The Far Ultraviolet Reflection Spectrum of Uranus: Results from the Voyager Encounter, *Icarus*, 77, 439, 1989.
- 15) L. Wallace and R. V. Yelle, Resonance Line Transfer Calculations by Doubling Thin Layers, II: The Use of the RII Redistribution Function, *Ap. J.*, 346, 489, 1989.
- 16) R. V. Yelle and L. Wallace, Resonance Line Transfer Calculations by Doubling Thin Layers, I: Comparison with Other Techniques, *Ap. J.*, 346, 481, 1989.
- 17) R. V. Yelle, and J. I. Lunine, Evidence for a Molecule Heavier than Methane in the Atmosphere of Pluto, *Nature*, 339, 288, 1989.
- 18) W. B. Hubbard, R. V. Yelle and J. I. Lunine, Non-isothermal Pluto Atmosphere Models, *Icarus*, 84, 1, 1989.
- 19) A. L. Broadfoot, S. K. Atreya, J. L. Bertaux, J. E. Blamont, A. J. Dessler, T. M. Donahue, W. T. Forrester, D. T. Hall, F. Herbert, J. B. Holberg, D. M. Hunten, V. A. Krasnopolsky, S. Linick, J. I. Lunine, J. C. McConnell, H. W. Moos, B. R. Sandel, N. M. Schneider, D. E. Shemansky, G. R. Smith, D. F. Strobel and R. V. Yelle, Ultraviolet Spectrometer Observations of Neptune and Triton, *Science*, 246, 1459, 1989.
- 20) P. D. Parkinson, J. C. McConnell, B. R. Sandel, R. V. Yelle and A. L. Broadfoot, He 584 Å Dayglow at Neptune, *Geophys. Res. Letters*, 17, 1709, 1990.
- 21) D. F. Strobel, R. V. Yelle, D. E. Shemansky and S. K. Atreya, The Upper Atmosphere of Uranus, in *Uranus*, J. Bergstralh, Editor, published by the University of Arizona Press, Tucson, Arizona, 1991.
- 22) R. V. Yelle, J. I. Lunine, and D. M. Hunten, Energy Balance and Plume Dynamics in Triton's Lower Atmosphere, *Icarus*, 89, 347, 1991.
- 23) R. V. Yelle, Non-LTE Models of Titan's Upper Atmosphere, *Ap. J.*, 383, 380, 1991.

- 24) T. Majeed, J. C. McConnell, R. V. Yelle, Vibrationally Excited H₂ in Outer Planet Thermospheres: Fluorescence in the Lyman and Werner Bands, *Planet. Space Sci.*, 39, 1591, 1991.
- 25) R. V. Yelle, The Effects of Surface Roughness on Triton's Volatile Distribution, *Science*, 255, 1553, 1992.
- 26) M. Stevens, D. F. Strobel, M. Summers, R. V. Yelle, On the Temperature of Triton's Thermosphere, *Geophys. Res. Letters*, 19, 669, 1992.
- 27) J. A. Stansberry, R. V. Yelle and J. I. Lunine, Energy Coupling between Triton's Surface and Atmosphere, *Icarus*, 99, 242, 1992.
- 28) W. B. Hubbard, et al. (including R. V. Yelle), The Occultation of 28 Sgr by Titan, *Astron. Astrophys.*, 269, 541-563, 1993.
- 29) R. V. Yelle, F. Herbert, B. R. Sandel R. J. Vervack Jr. and T. M. Wentzel, The Distribution of Hydrocarbons in Neptune's Upper Atmosphere, *Icarus*, 104, 38-59, 1993.
- 30) M. Beauchamp et al. (including R. V. Yelle) Pluto Integrated Camera Spectrometer (PICS) Instrument, *SPIE*, 2214, 269-278, 1994.
- 31) J. A. Stansberry, W. B. Hubbard, J. I. Lunine, R. V. Yelle, and D. M. Hunten, Plutonian Mirages, *Icarus*, 111, 503-513, 1994.
- 32) L. Ben Jaffel, R. Prange, B. R. Sandel, R. V. Yelle. C. Emerich, D. Feng, and D. T. Hall, New Analysis of Voyager UVS H Lyman- α Emission of Saturn, *Icarus*, 113, 91-102, 1994.
- 33) K. Noll et al. (including R. V. Yelle), Hubble Space Telescope Spectroscopic Observations of Jupiter After the Collision of Comet P/ Shoemaker-Levy 9 *Science*, 267, 1307-1313, 1995.
- 34) Y. Wang and R. V. Yelle, Methane Heating Rates in Outer Planet Atmospheres, *J. Q. S. R. T.*, 00, 000-000, 1996.
- 35) R. V. Yelle, J. I. Lunine, R. H. Brown, and J. Pollack, Volatile Transport and Lower Atmospheric Structure on Triton, in *Neptune and Triton*, University of Arizona Space Science Series, D. Cruikshank, ed., Tucson AZ 1996.
- 36) J. Bishop, S. K. Atreya, P. N. Romani, G. S. Orton, B. R. Sandel and R. V. Yelle, The Middle and Upper Atmosphere of Neptune, in *Neptune and Triton*, University of Arizona Press, D. Cruikshank ed., Tucson AZ 1996.
- 37) R. V. Yelle and M. McGrath, Ultraviolet Spectroscopy of the SL-9 Impact Sites, I: The 175-230 nm Region, *Icarus*, 119, 90-111, 1996.
- 38) R. V. Yelle, L. A. Young, R. Vervack, Jr., R. E. Young, L. Pfister, and B. R. Sandel, The Structure of Jupiter's Upper Atmosphere: Predictions for Galileo, *J. Geophys. Res.*, 101, 2149-2161, 1996.
- 39) J. A. Stansberry, D. J. Pisano, and R. V. Yelle, The Emissivity of Nitrogen Ice on Triton and Pluto, *Planetary and Space Science*, 44, 945-955, 1996.

- 40) J. A. Stansberry, J. R. Spencer, B. Schmitt, A. Benchkoura, R. V. Yelle, and J. I. Lunine, A Model for the Overabundance of Methane in Pluto's Atmosphere, *Planetary and Space Science*, 44, 1051-1063, 1996.
- 41) R. V. Yelle and J. L. Elliot, Atmospheric Structure and Composition: Pluto and Charon, in *Pluto and Charon*, University of Arizona Press, D. Tholen and A. Stern, eds., 1996.
- 42) L. A. Young, R. V. Yelle, R. E. Young, A. Sieff, and D. B. Kirk, Gravity Waves in Jupiter's Thermosphere, *Science*, 276, 108-111, 1997.
- 43) S. A. Stern and R. V. Yelle, Pluto and Charon, a chapter in *The Encyclopedia of the Solar System*, T. V. Johnson and P. R. Weissman, eds., Academic Press, 1997.
- 44) J. L. Fox, and R. V. Yelle, Hydrocarbon Ions in Titan's Ionosphere, *Geophys. Res. Letts.*, 24, 2179-2182, 1997.
- 45) R. V. Yelle, E. Lellouch, D. Gautier, and D. F. Strobel, Engineering Models for Titan's Atmosphere, ESA SP-1177, pp 243-257, 1997.
- 46) C. A. Griffith, R. V. Yelle, and M. S. Marley, The Dusty Atmosphere of the Brown Dwarf GL229B, *Science*, 282, 2063-2067, 1998.
- 47) J. A. Stansberry and R. V. Yelle, Emmisivity and the Fate of Pluto's Atmosphere, *Icarus*, 141, 299-306, 1999.
- 48) Y. Bétreminieux and R. V. Yelle, HST Detection of H₂ Raman Scattering in the Jovian Atmosphere, *Icarus*, 142, 324-341, 1999.
- 49) C. A. Griffith and R. V. Yelle, Disequilibrium Chemistry in a Brown Dwarf's Atmosphere: Carbon Monoxide in Gliese 229B, *Ap. J.*, 519, 185-188, 1999.
- 50) H. Risbeth, R. V. Yelle, and M. Mendillo, Dynamics of Titan's Thermosphere, *Planet. Space Sci.*, 48, 51-58, 2000.
- 51) C. A. Griffith and R. V. Yelle, Equilibrium Chemistry in a Brown Dwarf's Atmosphere: Cesium in Gliese 229B, *Ap. J.*, 532, L59-62, 2000.
- 52) J. R. Spencer, M. A. McGrath, G. E. Ballester, R. V. Yelle, and K. L. Jessup, Discovery of Gaseous S₂ in Io's Pele Plume, *Science*, 288, 208-210, 2000.
- 53) I. C. F. Müller-Wodarg, R. V. Yelle, M. Mendillo, L. A. Young, and A. D. Aylward, The Thermosphere of Titan Simulated by a Global 3-Dimensional Time-Dependent Model, *J. Geophys. Res.*, 105, 20833-20856, 2000.
- 54) Yelle, R. V. Brown Dwarf Coronae, in "From Giant Planets to Cool Stars," C. A. Griffith and M. S. Marley, eds. 2000.
- 55) **R. V. Yelle**, C. A. Griffith, and L. A. Young, The Structure of Jupiter's Stratosphere at the Galileo Probe Entry Site, *Icarus*, 152, 331-346, 2001.
- 56) L. A. Young, J. C. Cook, **R. V. Yelle** and E. F. Young, Upper limits to the CO abundance on Pluto and Triton, *Icarus*, 153, 148-156, 2001
- 57) L. A. Soderblom et al. including **R. V. Yelle**, MICAS Observations of Comet p/Borrelly during the DS1 Encounter, *Science*, 296, 1087-1091, 2002.

- 58) Boice, D., L. A. Soderblom, D. T. Britt, R. H. Brown, B. R. Sandel, **R. V. Yelle**, B. J. Buratti, M. Hicks, R. Nelson, M. Rayman, J. Oberst, and N. Thomas, The Deep Space 1 Encounter with Comet 19p/Borrelly, *Earth Moon and Planets*, 89, 301-324, 2002.
- 59) I. C. F. Müller-Wodarg, and **R. V. Yelle**, Dynamics and Composition in Titan's Upper Atmosphere, *Geophys. Res. Letts.*, 29, 54-57, 2002.
- 60) Y. Bétrémieux and **R. V. Yelle**, HST Observation of Atmospheric Composition of Jupiter's Equatorial Region: Evidence for Tropospheric C₂H₂, *Icarus*, 163, 414-427, 2003.
- 61) **R. V. Yelle** and C. A. Griffith, HCN Fluorescence on Titan, *Icarus*, 166, 107-115, 2003.
- 62) I. C. F. Müller-Wodarg, **R. V. Yelle**, M. Mendillo, and A. D. Aylward, On the Global Distribution of Neutral Gases in Titan's Upper Atmosphere and its effects on the Thermal Structure, *J. Geophys. Res.*, vol 108,, no A12, 1453, doi: 10.1029/2003JA010054, 2003.
- 63) Majeed, T., J. H. Waite Jr., S. W. Bougher, **R. V. Yelle**, G. R. Gladstone, J. C. McConnell, and A. Bhardwaj. The ionospheres-thermospheres of the giant planets. *Adv. Space Res.* 33, 197-211. 2003.
- 64) B. Burratti, D. T. Britt, L. A. Soderblom, M. D. Hicks, D. C. Boice, R. H. Brown, R. Meier, R. M. Nelson, J. Oberst, T. C. Owen, A. S. Rivkin, B. R. Sandel, S. A. Stern, and **R. V. Yelle**, 9969 Braille: Deep Space 1 infrared spectroscopy, geometric albedo, and classification, *Icarus*, 167, 129-135, 2004.
- 65) **R. V. Yelle** and S. Miller, Jupiter's Thermosphere the Ionosphere in *Jupiter*, Cambridge University Press, Cambridge, 2005.
- 66) J. Moses, Th. Fouchet, **R. V. Yelle**, A. J. Friedson, G. S. Orton, B. Bézard, P. Drossart, G. R. Gladstone, T. Kostiuik, and T. A. Livengood, The Stratosphere of Jupiter, in *Jupiter*, Cambridge University Press, Cambridge, 2005.
- 67) L. A. Soderblom et al. including **R. V. Yelle**, Imaging Borrelly, *Icarus*, 167, 4-15, 2004.
- 68) L. A. Soderblom et al. including **R. V. Yelle**, Short-Wavelength Infrared (1.3-2.6 μm) Observations of the Nucleus of 19P/Borrelly, *Icarus*, 167, 100-112, 2004.
- 69) **R. V. Yelle**, L. A. Soderblom, and J. R. Jokipii, Formation of Jets in Comet 19P/Borrelly by Subsurface Geysers, *Icarus*, 167, 30-36, 2004.
- 70) K. L. Jessup, J. R. Spencer, G. E. Ballester, R. R. Howell, F. Roesler, V. Miquela, **R. V. Yelle**, the atmospheric signature of Io's Prometheus plume and anti-jovian hemisphere: evidence for a sublimation atmosphere, *Icarus*, 169, 197, 2004..
- 71) L. A. Young, **R. V. Yelle**, R. E. Young, Gravity Wave Spectra in Jupiter's Stratosphere, *Icarus* 173, 185-199, 2005.
- 72) **R. V. Yelle**, Aeronomy of Extra-Solar Giant Planets at Small Orbital Distances, *Icarus*, 170, 167-179, 2004.

- 73) J. H. Waite et al. Ion Neutral Mass Spectrometer Results from the first flyby of Titan, *Science*, 308, 982, 2005.
- 74) J. H. Waite et al. Oxygen Ions Observed Near Saturn's A Ring, *Science*, 307, 1260, 2005.
- 75) T. E. Cravens, I. P. Robertson, J. Clark, J. Wahlund, J. H. Waite Jr., S. A. Ledvina, H. B. Niemann, **R. V. Yelle**, W. T. Kasprzak, J. G. Luhmann, R. L. McNutt, I.-J. Ip, V. de la Haye, I. Müller-Wodarg, D. T. Young, A. J. Coates, Titan's ionosphere: Model comparisons with Cassini Ta data, *Geophys. Res. Letts.*, 32, L12108, 2005.
- 76) C. A. Griffith, P. Penteado, T. K. Greathouse, H. G. Roe, **R. V. Yelle**, Observations of Titan's Mesosphere, *Ap. J.*, 629, L57, 2005.
- 77) J. H. Waite, Jr., H. B. Niemann, D. L. Burket, T. E. Cravens, W.-H. Ip, W. T. Kasprzak, W. S. Lewis, J. G. Luhmann, R. L. McNutt, Jr., J. E. Richards, and **R. V. Yelle**, The Cassini Ion and Neutral Mass Spectrometer (INMS) Investigation, *Space Science Reviews*, 114, 113, 2005.
- 78) I. C. F. Müller-Wodarg, M. Mendillo, **R. V. Yelle**, and A. D. Aylward, A global circulation model for Saturn's thermosphere, *Icarus*, 180, 147, 2006.
- 79) T. E. Cravens, I. P. Robertson, J. H. Waite, **R. V. Yelle**, W. T. Kasprzak, C. N. Keller, S. A. Ledvina, H. B. Niemann, J. G. Luhmann, R. L. McNutt, W. J. Ip, V. de LaHaye, I. Mueller-Wodarg, J. E. Wahlund, V. G. Anicich, V. Vuitton, Composition of Titan's Ionosphere, *Geophys. Res. Letts.*, 33, L07105, 2006.
- 80) **Yelle, R. V.**, et al. Vertical Structure of Titan's Atmosphere, *Icarus*, 182, 567-576, 2006.
- 81) Vuitton, V., **R. V. Yelle**, and V. Anicich, The Nitrogen Chemistry of Titan's Upper Atmosphere Revealed, *Ap. J.* 647, L175-L178, 2006.
- 82) Galand, M., **R. V. Yelle**, A. J. Coates, H. Backes, and J.-E. Wahlund, Electron Temperature of Titan's Sunlit Ionosphere, *Geophys. Res. Letts*, 33, L21101, 2006.
- 83) Müller-Wodarg, I. C. F., **R. V. Yelle**, N. Borggren and J. H. Waite Jr., Waves and Horizontal Structures in Titan's Thermosphere, *J. Geophys. Res.*, 111, A12315, 2006.
- 84) J. H. Waite et al. Cassini Ion and Neutral Mass Spectrometer: Enceladus Plume Composition and Structure, *Science* 311, 1419-1422, 2006.
- 85) D.~H.~Rodgers et al. (including **R. V. Yelle**).Advanced Technologies Demonstrated by the Minature Integrated Camera and Spectrometer (MICAS) Aborad Deep Space 1. *Space Science Reviews*, 129, 309-326, 2007.
- 86) V. De La Haye et al. (including R. V. Yelle). Cassini Ion and Neutral Mass Spectrometer adta in Titan's Upper Atmosphere and Exosphere: Observations of a Suprathermal Corona. *J. Geophys. Res.*, 112, CiteID A07309, 2007.
- 87) Jessup, K. L., J. Spencer, and **R. V. Yelle** (2007), Sulfur Volcanism on Io, *Icarus*, 192, 24-40.
- 88) Vuitton. V., **R. V. Yelle**, and M. McEwan (2007), Ion Chemistry and N-Containing Molecules in Titan's Upper Atmosphere, *Icarus*, 191, 722-742.

- 89) Vuitton, V., **R. V. Yelle**, and J. Cui (2008), Formation and distribution of benzene on Titan, *J. Geophys. Res.*, 113, 000-000, doi:10.1029/2007JE002997.
- 90) Cui, J. and R. V. Yelle (2008), The Distribution and Escape of H₂ from Titan, *J. Geophys. Res.*, 113, doi:10.1029/2007JE002032.
- 91) Müller-Wodarg, I. C. F., **R. V. Yelle**, J. Cui, and J.-H. Waite (2008), Horizontal variations and dynamics of Titan's thermosphere, *J. Geophys. Res.*, doi:10.1029/2007JE003033.
- 92) **Yelle, R. V.**, J. Cui, and I. C. F. Müller-Wodarg (2008), CH₄ Escape from Titan's Atmosphere. *J. Geophys. Res.*, doi:10.1029/2007JE003031.
- 93) Hörst, S., V. Vuitton, and **R. V. Yelle** (2008), The Origin of Oxygen Species in Titan's Atmosphere, *J. Geophys. Res.*, doi:10.1029/2008JE003135.
- 94) Ågren, K., J.-E. Wahlund, R. Modolo, D. Lummerzheim, M. Galand, I. Mueller-Wodarg, P. Canu, W. S. Kurth, T. E. Cravens, **R. V. Yelle**, J. H. Waite, Jr., A. J. Coates, G. R. Lewis, D. T. Young, C. Bertucci, M. K. Dougherty (2008), On magnetospheric electron impact ionization and dynamics in Titan's ram-side and polar ionosphere – a Cassini case study, *Annales Geophysicae*, 25, 2359.
- 95) Carrasco, N., C. Alcaraz, O. Dutuit, S. Pleissis, R. Thissen, V. Vuitton, **R. V. Yelle**, and P. Pernot (2008), Sensitivity of a Titan ionospheric model to the ion-molecule reaction parameters, *Planet. Space. Sci.*, doi:10.1016/j.pss.2008.04.007.
- 96) **R. V. Yelle**, H. Lammer, and W.-H. Ip (2008), Aeronomy of Extra-Solar Giant Planets, *Space Sci. Reviews*, 139, 437-451.
- 97) I. C. F. Müller-Wodarg, D. F. Strobel, J. I. Moses, J. H. Waite, J. Crovisier, **R. V. Yelle**, S. W. Bougher, and R. G. Roble (2008), Neutral Atmospheres, *Space Science Reviews*, 139, 191-234.
- 98) Vuitton, V., **R. V. Yelle**, and P. Lavvas (2008), Composition and Chemistry of Titan's Thermosphere and Ionosphere, *Philosophical Transactions of the Royal Society*, 367, 729-741.
- 99) Cravens, T. E., I. P. Robertson, J. H. Waite Jr., **R. V. Yelle**, V. Vuitton, A. J. Coates, J.-E. Wahlund, K. Agren, M. S. Richard, V. De la Haye, A. Wellbrock, and F. M. Neubauer (2009) Model-data comparisons for Titan's nightside ionosphere, *Icarus*, 199, 174-188.
- 100) Cui, J., M. Galand, **R. V. Yelle**, V. Vuitton, J.-E. Wahlund, P. Lavvas, I. C. F. Müller-Wodarg, T. E. Cravens, W. T. Kasprzak, and J. H. Waite Jr. (2009), Diurnal variations of Titan's ionosphere, *J. Geophys. Res.*, 114, A6, CiteID A06310.
- 101) L. Moore, M. Galand, I. C. F. Müller-Wodarg, **R. V. Yelle**, and M. Mendillo (2009), Plasma temperatures in Saturn's ionosphere, *J. Geophys. Res.* 113, A10, doi: 10.1029/2008JA013373.
- 102) A. Coustenis, et al. (including **R. V. Yelle**) (2009), TandEM: Titan and Enceladus Mission, *Experimental Astronomy*, 23, 893-946.

- 103) Cui, J., **R. V. Yelle**, V. Vuitton¹, J. H. Waite, Jr., W. T. Kasprzak, D. Gell, H. B. Niemann, I. C. F. Muller-Wodarg, N. Borggren, G. Fletcher, E. L. Patrick and E. Raaenn (2009) Analysis of Titan's neutral upper atmosphere from Cassini Ion and Neutral Mass Spectrometer measurements, *Icarus*, 200, 581-615.
- 104) Lavvas, P., **R. V. Yelle**, and V. Vuitton (2009), The Detached Haze Layer in Titan's Mesosphere, *Icarus*, 201, 626-633.
- 105) Vuitton, V., P. Lavvas, **R. V. Yelle**, M. Galnad, A. Wellbrock, G. T. Lewis, A. Coates and, and J.-E. Wahlund (2009). Negative Ion Chemistry in Titan's Upper Atmosphere, *Planetary and Space Science*, 57, 1558-1572.
- 106) Thissen, R., V. Vuitton, P. Lavvas, J. Lemaire, C. Dehon, O. Dutuit, M. Smith, S. Turchini, D. Catone, **R. V. Yelle**, P. Pernot, A. Somogyi, and M. Coreno (2009) Laboratory studies of molecular growth in Titan's ionosphere, *J. Phys. Chem. A*, 113, 11211-11220.
- 107) Wahlund, J.-E., M. Galand, I. C. F. Müller-Wodarg, J. Cui, **R. V. Yelle**, F. J. Crary, K. Mandt, B. Magee; J. H. Waite; D. T. Young; A. J. Coates; P. Garnier; K. Ågren; M. André; A. Eriksson; T. E. Cravens; V. Vuitton; D. A. Gurnett; W. Kurth (2009) On the abundance of heavy molecular ions in Titan's ionosphere, *Planet. Space. Sci.*, 57, 1857-1865.
- 108) Robertson, I. P., T. E. Cravens, J. H. Waite, **R. V. Yelle**, V. Vuitton., A. J. Coates, J.-E. Wahlund, K. Ågren, K. Mandt, B. Magee, M. S. Richard, E. Fattig (2009). Structure of Titan's ionosphere: Model comparison with Cassini data, *Planet. Space Sci.*, 57, 1834-1846.
- 109) Cravens, T. E., **R. V. Yelle**, J.-E. Wahlund, D. E. Shemansky and A. F. Nagy, Composition and Structure of the Ionosphere and Thermosphere, in *Titan from Cassini-Huygens*, R. H. Brown, J.-P. Lebreton, J. H. Waite, eds., Springer, New York
- 110) Cui, J., M. Galand, **R. V. Yelle**, J.-E. Wahlund, K. Ågren, J. H. Waite Jr., and M. K. Dougherty (2009) Ion transport in Titan's upper atmosphere, *J. Geophys. Res.*, 115, A6, CiteID A06314.
- 111) Galand, M., **R. V. Yelle**, J. Cui, J.-E. Wahlund, V. Vuitton, A. Wellbrock, and A. Coates (2010) Ionization Sources in Titan's Deep Ionosphere. *J. Geophys. Res.*, 115, A07312, doi:10.1029/2009JA015100.
- 112) Lavvas, P., **R. V. Yelle**, and C. A. Griffith (2010). Titan's vertical aerosol structure at the Huygens landing site, *Icarus*, 210, 832-842.
- 113) Koskinen, T., **R. V. Yelle**, P. Lavvas, and N. K. Lewis (2010). Characterizing the thermosphere of HD209458b with UV transit observations. *Ap. J.*, 723, 116-128.
- 114) **Yelle, R. V.**, V. Vuitton, P. Lavvas, S. J. Klippenstein, M. A. Smith, S. M. Horst, J. Cui (2010) Formation of NH₃ and CH₂NH in Titan's Upper Atmosphere, *Trans. Faraday Soc.*, vol. 147, p. 31
- 115) Lewis, N. K., B. R. Sandel, and **R. V. Yelle**, J.-L. Bertaux, E. Quémerais, F. Montmessin (2010). SPICAM measurements of O₂ on Mars, *Geophys. Res. Letts.*, submitted.

- 116) Lavvas, P., C. A. Griffith, and **R. V. Yelle** (2010). Condensation in Titan's atmosphere at the Huygens landing site. *Icarus*, Volume 215, Issue 2, p. 732-750
- 117) Cui, J., R. V. Yelle, I. C. F. Müller-Wodarg, P. P. Lavvas, and M. Galand (2011), The implications of the H₂ variability in Titan's exosphere, *J. Geophys. Res.*, 116, A11324, doi:10.1029/2011JA016808.
- 118) Lavvas, P., M. Galand, **R. V. Yelle**, A. N. Heays, B. R. Lewis, G. R. Lewis, and A. J. Coates (2010), Energy Deposition and Primary Chemical Products in Titan's Upper Atmosphere, *Icarus*, 213, 233-251.
- 119) Vuitton, V., R. V. Yelle, P. Lavvas, S. J. Klippenstein, Radiative Association at Low Pressure. *The Astrophysical Journal*, Volume 744, Issue 1, article id. 11, 7 pp. (2012)
- 120) Koskinen, T. T., **R. V. Yelle**, D. Snowden, P. Lavvas, B. R. Sandel, F. J. Capalbo, Y. Benilan, and R. A. West (2011), The Mesosphere and Thermosphere of Titan Revealed by Cassini/UVIS Stellar Occultations, *Icarus* 216, 507–534.
- 121) Sarah M. Horst, **R. V. Yelle**, A. Buch, N. Carrasco, G. Cernogora, O. Dutuit, E. Quirico, E. Sciamma-O'Brien, M. A. Smith, A. Somogyi, C. Szopa, R. Thissen, and V. Vuitton (2012), Formation of prebiological molecules in a Titan atmosphere simulation experiment, *Astrobiology*, vol. 12, issue 9, pp. 809-817
- 122) J. Cui, **R. V. Yelle**, D. F. Strobel, I. C. F. Müller-Wodarg, D. S. Snowden, T. T. Koskinen, and M. Galand, (2012) The CH₄ structure in Titan's upper atmosphere revisited *Journal of Geophysical Research*, Volume 117, Issue E11, CiteID E11006.
- 123) Vigren. E., Galand, M., **Yelle, R. V.**, Wahlund, J.-E., Agren, K., Lavvas, P., Mueller-Wodarg, I., Strobel, D., Vuitton, V., Bazin, A., (2013). On the thermal electron balance in Titan's sunlit upper atmosphere, *Icarus*, Volume 223, Issue 1, p. 234-251.
- 124) Capalbo, F. J.; Bénilan, Y., **Yelle, R. V.**, Koskinen, T. Sandel, B. Holsclaw, G. McClintock, W. (2013) Solar Occultation by Titan Measured by Cassini/UVIS, *The Astrophysical Journal Letters*, Volume 766, Issue 2, L16.
- 125) Tinetti, G.; Beaulieu, J. P.; Henning, T.; Meyer, M.; Micela, G.; Ribas, I.; Stam, D.; Swain, M.; Krause, O.; Ollivier, M.; **and 125 coauthors**, EChO. Exoplanet characterisation observatory, *Experimental Astronomy*, Volume 34, Issue 2, pp.311-353
- 126) Koskinen, T.~T., M. J. Harris, **R. V. Yelle**, and P. Lavvas (2013) Escape of Heavy Ions from HD 209458 b I. A Photochemical-Dynamical Model, *Icarus*, 226, 1678-1694.
- 127) Koskinen, T.~T., **R. V. Yelle**, and P. Lavvas (2013) Escape of Heavy Ions from HD 209458 b II. Interpretation of the Observations, *Icarus*, 226, 1695-1708.
- 128) Vigren, E., Galand, M., Shebantis, O., Wahlund, J.-E., Geppert, W., Lavvas, P., Vuitton, V., and Yelle, R. V. (2014). Increasing Positive Ion Number Densities below the Peak of Ion-Electron Pair Production in Titan's Ionosphere, *Ap. J.* 786, 69-73.

- 129) Snowden, D., **R. V. Yelle**, J. Cui, J.-E. Wahlund, N.J.T. Edberg, and K. Agren (2013), The Thermals Structure of Titan's Upper Atmosphere, I: Temperature Profiles from Cassini INMS Observations, *Icarus*, 226, 552-582.
- 130) Snowden, D., **R. V. Yelle**, M. Galand, A. Coates, A. Wellbrock, G. Jones, and P. Lavvas (2013), Auroral electron precipitation and flux tube erosion in Titan's upper atmosphere, *Icarus*, 226, 186-204.
- 131) T. Koskinen, B. R. Sandel, **R. V. Yelle**, F. J. Capalbo, G. M. Holsclaw, W. E. McClintock, and S. Edgington (2013), The Density and Temperature Structure near the Exobase of Saturn from Cassini UVIS Solar Occultations, *Icarus*, 226, 1318-1330.
- 132) D. Snowden and **R. V. Yelle** (2014) , The Thermal Structure of Titan's Upper Atmosphere, II: Energetics, *Icarus*, 228, 64-77.
- 133) Yelle, R. V., Mahieux, A., Morrison, S., and Vuitton, V. (2014) Perturbation of the Mars Atmosphere by the near-collision with Comet C/2013 A1 (Siding Spring), *Icarus*, 237, 202-210.
- 134) Cui, J., Yelle, R. V., Li, T., Snowden, D., Muller-Wodarg, I., Density Waves in Titan's Atmosphere, *J. Geophys. Res.*, 119, 490-518.
- 135) Zhang, X., Nixon, C. A., Shia, R. L., West, R. A., Irwin, P. G. J., Yelle, R. V., Allen, M., Yung, Y. L. (2013). Radiative forcing of the stratosphere of Jupiter, Part I: Atmospheric cooling rates from Voyager to Cassini, *Planetary and Space Science*, 88, 3-25.
- 136) D. Snowden and **R. V. Yelle** (2014), The global precipitation of magnetospheric electrons into Titan's upper atmosphere, *Icarus*, submitted.