

**Robert A. Haaser** 19002 Dallas Parkway Apt 1926, Dallas TX 75287 | rhaaser@utdallas.edu  
William B. Hanson Center for Space Sciences, University of Texas at Dallas Ph.D. Candidate

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<b>EDUCATION</b>	<b>Ph.D. Candidate</b> University of Texas at Dallas	<b>Physics</b> Expected Defense/Graduation: Jan/May 2012
	<b>Master of Science</b> Texas A&M University <i>Thesis: Quadratic Voltage Profiles in Lead-acid Cells for slow, Steady Processes</i>	<b>Physics</b> August 1999
	<b>Bachelor of Science</b> University of Dallas <i>Thesis: An Analysis of the Potential Hazard near Power-lines</i>	<b>Physics</b> May 1995

**PUBLICATIONS** Haaser, R. A., G. D. Earle, R. A. Heelis, W. R. Coley, and J. H. Klenzing (2010), Low-latitude measurements of neutral thermospheric helium dominance near 400 km during extreme solar minimum, *J. Geophys. Res.*, 115, A11318, doi:10.1029/2010JA015325.

Bernhardt, P. A., J. B. Baumgardner, A. Bhatt, R. G. Caton, A. Coster, P. J. Erickson, J. D. Huba, C. R. Kaplan, R. A. Haaser, D. L. Hysell, M. F. Larsen, F. D. Lind, T. R. Pedersen, R. F. Pfaff, P. A. Roddy, S. P. Rodriguez, P. W. Schuck, C. L. Siefring, S. M. Smith, E. R. Talaat, J. F. Thomason, R. T. Tsunoda, and R. H. Varney (2011), Ground and space-based measurement of rocket engine burns in the ionosphere, *IEEE Trans. Plasma Sci.* (submitted).

Klenzing, J. H., D. E. Rowland, R. F. Pfaff, G. Le, H. Freudenreich, R. A. Haaser, A. G. Burrell, R. A. Stoneback, W. R. Coley, and R. A. Heelis (2011), Observations of low-latitude plasma density enhancements and their associated plasma drifts, *J. Geophys. Res.*, 116, A09324, doi:10.1029/2011JA016711.

Heelis, R. A., R. Stoneback, G. D. Earle, R. A. Haaser, and M. A. Abdu (2010), Medium-scale equatorial plasma irregularities observed by Coupled Ion-Neutral Dynamics Investigation sensors aboard the Communication Navigation Outage Forecast System in a prolonged solar minimum, *J. Geophys. Res.*, 115, A10321, doi:10.1029/2010JA015596.

<b>TALKS</b>	<i>A Correlative Study of Low Latitude Velocity and Density Irregularities in the Ionosphere during Solar Minimum</i> University of Dallas, Seminar .	Nov 2011
	<i>Low Latitude Measurements of Neutral Thermospheric Helium Dominance near 400 km during the Extreme Solar Minimum of 2008 and 2009</i> Aerospace Corporation, Seminar.	Apr 2011
	<i>A Correlative Study of Ionospheric Low Latitude Velocity and Density Irregularities during Solar Minimum</i> C/NOFS Colorado Meeting.	May 2010

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<b>POSTERS</b>	<i>Regular and Seasonal Statistical Characteristics of Well-formed Plasma Depletion and Enhancement Plumes under Quiet Solar Conditions</i> American Geophysical Union Fall Meeting	Dec 2011
	<i>A Study of Ionospheric Low-Latitude Velocity and Density Irregularity Correlations during Solar Minimum</i> American Geophysical Union Fall Meeting	Dec 2010
	<i>Observations of a Space Shuttle Burn by CINDI Instruments aboard C/NOFS</i> American Geophysical Union Fall Meeting	Dec 2009
	<i>C/NOFS Neutral Wind Meter Measurements of Thermospheric Helium Dominance near 400 km during Extreme Solar Minimum</i> Coupling, Energetics and Dynamics of Atmospheric Regions Meeting	Jun 2009
	<i>Thermo-galvanic Cells with Single-walled and Multi-walled Carbon Nanotube Electrodes</i> University of Texas at Dallas	Aug 2007
<b>LABORATORY EXPERIENCE</b>	Space Science/Physics, Research Assistant W. B. Hanson Center for Space Sciences, UT Dallas	Jan 2008 - 2010
	Galvanic Thermo-cell Physics, Research Nanotech Institute, UT Dallas	Jan 2007 - Aug 2007
	Battery Physics, Research Assistant Texas A&M University	Mar 1996 - Aug 1999
	Health Physics of Powerlines, Research Assistant O'hara Institute, University of Dallas	Jun 1994 - May 1995
	High Energy Physics, Internship/Work Study Superconducting Super-Collider (URA/DOE)	Jun 1991 - Sep 1993
<b>SCHOLARSHIPS AND AWARDS</b>	Texas Space Grant Consortium (TSGC) Fellowship Excellence in Education Foundation Scholarship, UT Dallas	Aug 2009 – May 2011 Aug 2008 – Jun 2010
<b>TECHNICAL SKILLS</b>	<i>Knowledge of Equipment and Standards:</i> Low pressure plasma and neutral particle detection designs, digital multi-meters w/ remote interface capabilities/GPIB, Bayard-Alpert ion gauges, High-vacuum systems and components, pH probes/electrometers, scanning electron microscopes (SEM), optical scanning microscopes (ZYGO/KMS), ion drift meters (IDMs), retarding potential analyzers (RPAs), and the Communication/Navigation Outage Forecasting System (C/NOFS) satellite.	
	<i>Knowledge of Computer Platform, Programming Languages, Models and Software:</i> Windows, Unix/Linux, Mac-OS, DOS, VAX. SAMI2, C++, MATLAB, Labview w/ interface, Visual Basic, Javascript, Fortran, SAMI2, IRI, MSIS, (learning) IDL.	

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**OTHER EXPERIENCE**

Adjunct Physics Instructor Austin Community College (Austin, TX)	Jun 2006 – Aug 2006
Adjunct/G.E. Physics/Math Instructor ITT Technical Institute – Seattle (Tukwila, WA)	Sep 2002 - Sep 2004
Engineering Analysis The Glosten Associates (Seattle, WA)	Aug 2002, Jul 2004
Adjunct Physics Instructor Embry-Riddle Aeronautical University – Seattle (Renton, WA)	May 2002 - Jul 2002
Manufacturing Metrology Engineer DuPont Photomasks, Inc. – Round Rock (Round Rock, TX)	Jul 2000 - Dec 2001
High School Physics Teacher Highland Park High School (Dallas, TX)	Aug 1999 - May 2000

**MORE SCHOLARSHIPS AND AWARDS**

Instructor of the Quarter, ITT Technical Institute – Seattle	Feb 2004, and May 2004
Applause for Excellence, DuPont Photomasks – RR	Nov 2000, Dec 2001
Physics Department Award, University of Dallas	May 1995.
Award for Outstanding Presentation, APS meeting/Huntsville, TX	Mar 1995.

**WEB PAGE** <http://www.utdallas.edu/~rhaaser>