

DR. JARED CARL WORKMAN
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EDUCATION	<p>2010 Ph.D. <i>Astrophysics</i> <ul style="list-style-type: none"> • University of Colorado Boulder, CO </p> <p>2005 M.S., <i>Astrophysics</i> 3.94 GPA <ul style="list-style-type: none"> • University of Colorado Boulder, CO </p> <p>2003 B.S., <i>Physics and Mathematics</i> Summa Cum Laude 3.94 GPA <ul style="list-style-type: none"> • Temple University Philadelphia, PA </p> <p>2000 B.A., <i>Psychology</i> Summa Cum Laude 3.96 GPA <ul style="list-style-type: none"> • Temple University Philadelphia, PA </p>
AWARDS	<p>W.W. Smith Scholarship 1998-2000 Murray Greene Award Presidential Scholars Award 2000 and 2003</p>
COMPUTER SKILLS	<p>Operating Systems - Windows, Linux, MacOs Software Packages - Microsoft Office, Mathematica, Maxwell's 3d Simulator, VAPOR Programming Languages, Extensive Experience - C, IDL, Fortran, (X)HTML/CSS Programming Languages, Basic Proficiency - JAVA, PHP, MySQL Programming Languages, Familiarity – OpenMP, MPI Extensive experience with Open MP and MPI parallelized MHD & Fluid grid based codes Extensive experience using supercomputing platforms Teragrid and Columbia Extensive experience developing application specific software using multiple languages</p>
RESEARCH EXPERIENCE	<p><i>Spring 2005 - Present JILA - Phil Armitage's Group Boulder, CO</i> <u>Research Assistant</u> Simulated accretion disks, Molecular Cloud/Black Hole mergers and Magnetohydrodynamic (MHD) instabilities using numerous Fortran and C based advanced parallel 3-D grid based codes. Studied MHD turbulence and instabilities, variability in accretion disks due to hydrodynamic turbulence and thermal effects, star formation and Bondi Accretion onto black holes. Semi-Analytically modeled the afterglow spectrum in Gamma Ray Bursts incorporating relativistic effects and varying magnetic field topologies. Published in multiple, peer-reviewed journals. Presented several talks to faculty and students. Oversaw the development, implementation and analysis of multiple, concurrent projects.</p> <p><i>2004 - 2005 SWRI - Solar Physics Group Boulder, CO</i> <u>Research Assistant</u> Modeled the thermal response of satellite hardware using IDL. Developed image filtering/manipulation routines image and data analysis routines to examine sounding rocket solar images.</p> <p><i>Summer 2000 Physics Department Temple University</i> <u>Research Assistant</u> Conducted research and performed computer modeling in project to detect a candidate for dark matter. Responsibilities included object modeling using "Maxwell's 3D Simulator" (an AutoCAD like program designed to measure electrical and magnetic field forces), examining naturally occurring radiation output from a steel containment chamber, and information analysis.</p> <p><i>1996 - 2003 Counselors for Management Inc. Abington, PA</i> <u>Research Assistant</u> Worked as an independent contractor assisting in government and industry sponsored projects. Projects involved technical assessment of new and emerging products and processes. Responsibilities included database construction, data analysis, and report creation.</p>

