Curriculum Vitae: **Thompson S. Le Blanc**

(615) 343-4623
6911 Stevenson Center
Nashville, TN 37235
thompson.leblanc@vanderbilt.edu

http://astro.phy.vanderbilt.edu/~leblant

Education

Vanderbilt University, Nashville, TN
Doctor of Philosophy in Physics/Astronomy, August 2012
Advisor: Dr. Keivan Stassun
Thesis Title: The Role of Disks the in Angular Momentum Evolution of Young Low-Mass Stars

Vanderbilt University, Nashville, TN
Master of Science in Physics/Astronomy, May 2010

Fisk University, Nashville, TN
Master of Arts in Physics, May 2006

Universidad Metropolitana, San Juan, Puerto Rico
Bachelor of Science in Computer Sciences, May 2003
Area/Topic of Research: *Fabrication of BioMarkers for E.Coli Bacteria using Specially Prepared Luminescent Silicon*

Honors/Awards

- *NASA Graduate Student Researchers Program Fellow*, Sept 2009 - Present
- *NASA Harriett G. Jenkins Pre-Doctoral Fellow, Cohort 6*, June 2006 – June 2009
- *Fisk Astronomy & Space Science Training (FASST) Fellow*, Jan 2004 – May 2006

Grants

NASA Spitzer Archival Research Grant, 2007-2009

- *PI:* Dr. Keivan Stassun*, Co-Author:* Thompson Le Blanc
  Title: Spectral Energy Distribution of the First Brown-Dwarf Eclipsing Binary
  Amount: $15K

Refereed Publications

- T. Le Blanc, K.R. Covey, K.G. Stassun, "Spectral Energy Distributions of Young Stars in IC 348: The Role of Disks in Angular Momentum Evolution of Young, Low-Mass Stars" *2011, Astronomical Journal, Vol. 142, pp.55-65*
- T. Le Blanc, K.G. Stassun, K.R. Covey, "Spectral Energy Distributions of Young Stars in Orion: The Role of Disks in Angular Momentum Evolution of Young, Low-Mass Stars II" (in prep)
- A. Nota, T. Le Blanc, E. Sabbi, D. Lennon, "Characteristics of Giant Stars in NGC 346 in the Small Magellanic Cloud" (in prep)

Research Experience

NASA Goddard Space Flight Center, Greenbelt, MD
Research Asisstant, 09/2010 - Present
Advisor: Dr. Carol Grady

- Characterization of the outflows of DG Tau as the possible source of variability in the silicate feature of its spectral energy distributions.

Vanderbilt University, Nashville, TN
*Research Assistant***,** 01/2006 – Present
Advisor: Dr. Keivan Stassun

- Stringent tests of 'disk-locking' theory for stellar angular momentum evolution in pre-main-sequence stars, using detailed modeling of spectral energy distributions of large samples in the young clusters of Orion and IC 348.

Space Telescope Science Institute (STScI), Baltimore, MD
*Research Assistant***,** 06/2008 – 08/2008
Advisor: Dr. Antonella Nota

- Investigation into the characteristics of giant stars in NGC 346 in the Small Magellanic Cloud, including age, mass, and radius of the stellar samples studied

Havard-Smithsonian Center for AstroPhysics, Cambridge, MA
*Research Assistant***,** 06/2007- 08/2007
Advisor: Dr. Kevin Covey

- Initial investigation on the angular momentum evolution history of targets in IC 348 in Perseus

Training, Development, and Mentoring Experience

Vanderbilt University, Nashville, TN
Teaching Assistant, 08/2009 - 05/2010

- Conducted undergraduate introductory physics labs for a two semester course
- Included setting up lab equipment, teaching labs, and administering tests and exams

Outreach and Public Understanding of Science

Center for Science Outreach, Vanderbilt University, Nashville, TN
Scientist in the Classroom Program participant, 2011-present

- Directing outreach to 80 middle school science students using hands-on activities in science
- Preparing and presenting astronomy related experiments and activities to teach the principles of astrophysics

Scientist in the Classroom Program participant, 2007-2009

- Directed outreach to 60 high-school science students using hands-on activities in science
- Conducted physics, biology, and chemistry experiments to teach the principles of science

Fisk/Vanderbilt University, Nashville, TN
Fisk-Vanderbilt Roadshow, 2004-present

- Directed outreach to local elementary and high school students, as well as the general public, using a portable, inflatable planetarium to teach concepts of astronomy

Dyer Observatory, Nashville, TN
Observatory Volunteer, 2004-present

- Volunteer in outreach program for local elementary and high school students, as well as the general public, using onsite telescope and associated tools to teach concepts of astronomy

Presentations

T. Le Blanc, K. Covey, K. Stassun, "Modeling the Spectral Energy Distributions of Young Stars: Testing Stellar Angular Momentum Evolution Theory and Characterising the Young Stelalr Populations in IC 348," presented at June 2010 *National Capital Area Disks Metting III*, NASA Goddard Space Flight Center, Greenbelt, MD

T. Le Blanc, K. Stassun, "Monte-Carlo Models of Young Stars With Accretion Disks in the Taurus-Auriga and Orion Regions," presented at *Joint NSBP/NSHP 2007*, Seattle, WA

T. Le Blanc, K. Stassun, "Monte-Carlo Models of Young Stars With Accretion Disks in the Taurus-Auriga Region," presented at *Joint NSBP/NSHP 2006*, Boston, MA

T. Le Blanc, K. Stassun, E. Jensen, "Monte-Carlo Models of Accretion Disks Around Young Stars in the Orion Nebula," presented at January 2005 *AAS 205th Winter Meeting*, San Diego, CA

Collaborating Researchers and Institutions

- **Dr. Kevin R. Covey**, *Havard-Smithsonian Center for AstroPhysics, Cornell University*: Modeling and analysis of SEDs of young stars in IC 348 and Orion Nebula.
- **Dr. Antonella Nota**, *Space Telescope Science Institute*: Characteristics of massive stars in NGC 346.
- **Dr. Carol Grady**, *NASA Goddard Space Flight Center*: Variability and extinction of outflow material of DG Tau as a source silicate variability.

Observing Experience

Cerro Tololo Inter-American Observatory (CTIO), *Cerro Tololo, Chile,* June 2004

- SMARTS 1.5m telescope, Spectroscopic data collected
- SMARTS 0.9m telescope, Photometric data collected

Apache Point Observatory (APO), *Sunspot, NM,* 12/2010 – 07/2011

- Astrophysical Research Consortium (ARC) 3.5m telescope, Goddard Fabry-Perot (GFP) instrument. Assisted in upgrade of GFP and testing of new configuration.

Skills

Familiar with T Tauri Radiative Transfer modeling methods
Programming proficiency in IDL
Bilingual (English and Spanish)

Professional Memberships/Affiliations

American Astronomical Society (AAS), *Member*, 2004-Present
National Society of Black Physicist (NSBP), *Member*, 2005-Present
Sigma Pi Sigma Society, Fisk University Chapter, *Member*, 2006-Present
Beta Kappa Ki (BKX) Society, Fisk University Chapter, *Member*, 2006-Present

References

- **Dr. Keivan Stassun**
  Department of Physics & Astronomy
  Vanderbilt University
  VU Station B 1807
  Nashville, TN, 37235
  Tel: (615)-322-2828
  email: keivan.stassun@vanderbilt.edu

- **Dr. Antonella Nota**
  Space Telescope Science Institute
  3700 San Martin Drive
  Baltimore, MD, 21218
  Tel: (410)-338-4520
  email: nota@stsci.edu

- **Dr. Kevin Covey**
  Department of Astronomy
  226 Space Sciences Building
  Cornell University
  Ithica, NY, 14853
  Tel: (607) 254-7462
  email: kcovey@astro.cornell.edu