Curriculum Vitae – Michael R. Hayden

Personal Information:

Citizen: USA

Address: Astronomy Department

New Mexico State University Cell: +1 (206) 595-0658 Box 30001, MSC 4500 Email: mrhayden@nmsu.edu

Las Cruces, NM 88003 http://astronomy.nmsu.edu/mrhayden

EDUCATION:

June 2015 (expected) Ph.D., Astronomy, New Mexico State University, Las Cruces, NM, USA

Advisor: Jon A. Holtzman

"Chemical Cartography with APOGEE: The Structure of the Milky Way Disk"

May 2014 M.S., Astronomy, New Mexico State University, Las Cruces, NM, USA

Advisor: Jon A. Holtzman

"Chemical Cartography with APOGEE: The Structure of the Milky Way Disk"

March 2010 B.S., Astronomy, University of Washington, Seattle, WA, USA

March 2010 B.S., Physics, University of Washington, Seattle, WA, USA

Professional Experience:

May 2011 – present Research Assistant with Dr. Jon A. Holtzman

New Mexico State University, Las Cruces, NM, USA

May 2011 – present APOGEE Daily Reduction Pipeline Operator

Reduce data, update field completion status for survey planning and operations

New Mexico State University, Las Cruces, NM, USA

May 2011 Assisted in commissioning of APOGEE instrument

Apache Point Observatory, Sunspot, NM, USA

Aug 2010 – May 2011 Teaching Assistant, undergraduate astronomy labs

New Mexico State University, Las Cruces, NM, USA

July 2008 – Mar 2010 Research Assistant with Dr. Zeljko Ivezic

University of Washington, Seattle, WA, USA

July 2008 – Mar 2010 Research Assistant with Dr. Chris Laws

University of Washington, Seattle, WA, USA

Feb 2008 – June 2008 – Research Assistant with Dr. Paula Szkody

University of Washington, Seattle, WA, USA

HONORS AND GRANTS:

2014 NMSU College of Arts and Sciences Travel Grant (\$500)

2012 NMSU College of Arts and Sciences Travel Grant (\$500)

2010 – 2013 NMSU Tuition Fellowship (\$10,243)

2010 B.S. with Distinction in Astronomy

University of Washington, Seattle, WA, USA

OUTREACH AND LEADERSHIP:

Aug 2010 – present	Public Telescope Viewing Promote awareness of astronomy through telescope viewing and discussion of the night sky for Open House public events, the observing portion of undergraduate classes, and visits from local elementary schools
Aug 2010 – present	Science Outreach Volunteer Plan and perform astronomy activities at grade school science events and family science nights; speak with students and their families about current events in astronomy
June 2012	Venus Transit Special Event Assisted with event planning, telescope setup and operation, and crowd control for this event, with several hundred attendees
May 2012	Solar Eclipse Special Event Assisted with event planning, telescope setup and operation, and crowd control for this event, with several hundred attendees

Presentations:				
Jan 2015	Invited Talk	"Chemical Cartography with SDSS-III APOGEE: DR12 Result" American Astronomical Society Meeting, Seattle, WA		
July 2014	Talk	"APOGEE MDFs and Updated Gradients" SDSS Collaboration Meeting, Park City, UT		
April 2014	Colloquia	"Chemical Cartography with APOGEE: The Structure of the Milky Way Disk" NMSU, Las Cruces, NM		
March 2014	Invited Talk	"Chemical Cartogrpahy with APOGEE" APOGEE Collaboration Meeting, UNAM, Mexico City, Mexico		
March 2014	Poster	"Chemical Cartography with APOGEE: Large-scale Mean Metallicity Maps of the Milky Way Disk" NMSU Graduate Research and Arts Symposium, Las Cruces, NM		
Jan. 2014	Poster	"Exploring Biases and Sample Selection Effects for Chemical Cartography with SDSS-III/APOGEE" American Astronomical Society Meeting, National Harbor, MD		
July 2013	Talk	"Chemical Cartography with SDSS-III/APOGEE" SDSS Collaboration Meeting, JHU, Baltimore, MD		
March 2013	Poster	"Milky Way Abundance Gradients from SDSS-III/APOGEE" NMSU Graduate Research and Arts Symposium, Las Cruces, NM		

r resentations (CON1.).				
Jan. 2013	Talk	"Distances to APOGEE Stars: A Bayesian Approach" APOGEE Collaboration Meeting, Carnegie Observatories, Pasadena, CA		
Jan. 2013	Poster	"Milky Way Abundance Gradients from SDSS-III/APOGEE Observations" American Astronomical Society Meeting, Long Beach, CA		
March 2012	Poster	"Searching for a Metallicity Gradient in the Milky Way" NSMU Graduate Research and Arts Symposium, Las Cruces, NM		
Jan. 2012	Talk	"Distance Estimates to APOGEE Stars" APOGEE Collaboration Meeting, TCU, Fort Worth, TX		

SOCIETIES/COMMITTEES:

PRESENTATIONS (CONT).

- American Astronomical Society (AAS) member, 2010 present
- NMSU Astronomy Graduate Student Organization (AGSO) member, 2010 present
- NMSU Graduate Student Council, AGSO representative, 2011 2012

REFEREED JOURNAL PAPERS:

Publications in which I directly contributed:

- 7. **Hayden, M. R.**, Bovy, J., Holtzman, J. A., et al. 2015, AJ, submitted; Chemical Cartography with APOGEE II: Metallicity Distribution Functions and the Chemical Structure of the Milky Way Disk
- 6. Holtzman, J. A., Hayden, M. R., et al. 2015, in prep; Spectroscopic Distances to Stars in SDSS-III APOGEE
- 5. Zasowksi, G., Menard, B., Bizyaev, D., Garcia-Hernandez, D. A., Garcia Perez, A., **Hayden, M.R.**, 7 co-authors. 2015, ApJ, 798, 35; Mapping the Interstellar Medium with Near-infrared Diffuse Interstellar Bands
- 4. Bovy, J., Nidever, D. L., Rix, H., Girardi, L., Zasowski, G., Chojnowksi, S. D., Holtzman, J., Epstein, C., Frincahboy, P., Hayden, M. R., 41 co-authors. 2014, ApJ, 790, 127; The APOGEE Red-clump Catalog: Precise Distances, Velocities, and High-resolution Elemental Abundances over a Large Area of the Milky Way's Disk
- 3. Hayden, M.R., 29 co-authors. 2014, AJ, 147, 116; Chemical Cartography with APOGEE: Large-scale Mean Metallicity Maps of the Milky Way Disk
- 2. Nidever, D. L., Bovy, J., Bird, J. C., Andrews, B. H., **Hayden, M.R.**, 38 co-authors. 2014, ApJ, 796, 38; Tracing Chemical Evolution over the Extent of the Milky Way's Disk with APOGEE Red Clump Stars
- Szkody, P., Anderson, S. F., Hayden, M. R., 10 co-authors. 2009, AJ, 137, 4011; Cataclysmic Variables from SDSS. VII. The Seventh Year (2006)

Publications in which I indirectly contributed:

- 4. Alam, S., et al. 2015, ApJS, submitted; arXiv: 1501.00963; The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III
- 3. Holtzman, J. A., et al. 2015, AJ, submitted; arXiv: 1501.04110; Abundances, Stellar Parameters, and Spectra From the SDSS-III/APOGEE Survey
- 2. Ahn, C. P., et al. 2014, ApJS, 211, 17; The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment
- 1. Anders, F., et al. 2014, A&A, 564, A115; Chemodynamics of the Milky Way. I. The first year of APOGEE data

References:

Dr. Jon A. Holtzman New Mexico State University Las Cruces, NM 88003 holtz@nmsu.edu Dr. Christopher W. Churchill New Mexico State University Las Cruces, NM 88003 cwc@nmsu.edu Dr. Jo Bovy Institute for Advanced Study Princeton, New Jersey 08540 bovy@ias.edu