Curriculum Vitae

Contact University of Texas at Austin E-mail: amann@astro.as.utexas.edu

Information Department of Astronomy

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Austin, Texas 78712-1205 USA http://www.as.utexas.edu/~amann/

RESEARCH Extrasolar planets, planet formation, stellar physics, cool stars, brown dwarfs, high-

INTERESTS precision photometry, optical and NIR spectroscopy.

References Dr. Adam Kraus University of Texas at Austin (alk@astro.as.utexas.edu)

Dr. Eric Gaidos University of Hawai'i (gaidos@hawaii.edu)

Dr. Phil Muirhead Boston University (philipm@bu.edu)

EDUCATION Institute for Astronomy, University of Hawai'i at Manoa,

Ph.D., Astronomy & Astrophysics, 2013

PhD Thesis Topic: Planets around cool stars: a spectroscopic and photomet-

ric study of M dwarfs and their planets

Advisor: Professor Eric Gaidos

M.S., Astronomy, 2010

Masters Thesis Topic: The Invisible Majority? Evolution and Detection of

Outer Planetary Systems without Gas Giants

Advisor: Professor Eric Gaidos

Masters Thesis Topic 2: BHOMs and the Redshift Evolution of the Cluster

Merger Fraction

Advisor: Dr. Harald Ebeling

Department of Physics and Astronomy, Johns Hopkins University,

B.S., Physics, with a minor in Mathematics, June 2008

EMPLOYMENT University of Texas at Austin,

Hubble Postdoctoral Fellow (2015 – Present)

Harlan J. Smith Postdoctoral Fellow (2013 – 2015)

Institute for Astronomy, University of Hawai'i at Manoa

Research Assistant (2009 – 2013); Advisor: Professor Eric Gaidos Research Assistant (2008 – 2009); Advisor: Dr. Jeffrey Morgan

Department of Physics and Astronomy, Johns Hopkins University,

Research Assistant (2007 – 2008); Advisor: Professor Rosemary Wyse

| Professional | TESS Cool Dwarf Target Selection group | 2015-present |
|--------------|---|--------------|
| ACTIVITIES & | TESS Target Selection working group | 2015-present |
| SERVICE | McDonald Time Allocation Committee | 2015-present |
| | Texas M Dwarfs and Exoplanets (Tex-MEX) Organizer | 2014-present |

| | Referee for AJ, ApJ, A&A, Nature | |
|--------------|---|-------------|
| | China Telescope Access Program Reviewer | 2016 |
| | NESSF reviewer | 2016 |
| | TAURUS Summer Research Program Mentor | 2016 |
| | OPTICON external reviewer | 2015-2016 |
| | Hubble Space Telescope Time Allocation Committee | 2015 |
| | Kepler Stellar properties working group | 2013-2014 |
| | Visiting Researcher at Boston University | 2014-2015 |
| | Cool Stars 18 Splinter Organizer | 2014 |
| | University of Hawaii Time Allocation Committee | 2012-2013 |
| | University of Hawaii Graduate Student Representative | 2011-2012 |
| | University of Hawaii Graduate Admissions Committee | 2010-2011 |
| | | |
| Grants & | Hubble Postdoctoral Fellowship Program | |
| Awards | Understanding Planets Through Their Host Stars | \$360,000 |
| (AS PI ONLY) | Harlan J. Smith Postdoctoral Fellowship | +300,000 |
| (''' | Kepler Input Catalog Atlas of Stellar Spectra | \$210,000 |
| | NASA-Keck Principal Investigator Data Award | , |
| | Weighing the Stars: The Mass-Luminosity Relation for M Dwarfs | \$41,500 |
| | Zodiacal Exoplanets in Time (ZEIT): The AO Follow-up Program | |
| | NASA-WIYN Principal Investigator Data Award | , |
| | Clusters with K2: Systematics from Membership and Binarity | \$29,000 |
| | ROSES-2015/K2 Guest Observer | |
| | Zodiacal Eoplanets in Time (ZEIT): The Hyades Cluster | \$40,000 |
| | University Research Council Award (Doctoral level) | \$1000 |
| | | |
| PI | Spitzer (IRAC) | 106 hours |
| Observing | Keck (LRIS, NIRC2, ESI) [UH, NASA] | 8 nights |
| TIME | Gemini (GNIRS) [NOAO] | 4 nights |
| ± 11112 | CFHT (ESPaDOnS) [UH] | 30 hours |
| | WIYN (Hydra) [NOAO] | 40 hours |
| | IRTF (SpeX) [UH, Open] | 26 nights |
| | Harlan J. Smith (TS23 Coude, IGRINS) [UT] | 24 nights |
| | LCOGT [UT] | 60 hours |
| | UH2.2m (SNIFS, OPTIC) [UH] | > 50 nights |
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${\rm Mentorship}$

Students Supervised:

& Teaching

Jennifer Medina; TAURUS Undergraduate; $Measuring\ Vsin(i)$ of young planet-hosting stars

Nathan Morris ; UT Undergraduate; Rotation periods and ages for K2 planet hosts

Richard Seifert; UT Undergraduate; Cluster Binarity from WIYN/Hydra

Guest Lectures:

Introduction to Astronomy (UT undergraduate); Blackbodies & Stars Planetary Systems (UT undergraduate); Properties of planet-hosts Planetary Systems (UT graduate); Interplay of planets and their host stars

Talks Public:

| Board of Visitors Discussion Group | 2015 |
|---|------|
| Board of Visitors Science Talk | 2014 |
| Friends of the IfA | 2012 |
| Invited: | |
| Institute of Astronomy, National Tsing Hua University | |
| Department of Astronomy, Boston University | 2014 |
| California Institute for Technology (Distinguished Visitor Program) | 2013 |
| 18 contributed/seminar talks not listed | |

First Author

"Zodiacal Exoplanets in Time (ZEIT) IV: seven transiting planets in the Praesepe cluster"

Publications (13)

Mann, Andrew W.; Gaidos, Eric; Vanderburg, Andrew; et al.; Submitted to AAS Journals.

"Zodiacal Exoplanets in Time (ZEIT) III: A short-period planet orbiting a premain-sequence star in the Upper Scorpius OB Association"

Mann, Andrew W.; Newton, Elisabeth R.; Rizzuto, Aaron C.; et al.; 2016, AJ 152 61.

"Zodiacal Exoplanets In Time (ZEIT) I: A Neptune-sized planet orbiting an M4.5 dwarf in the Hyades Star Cluster"

Mann, Andrew W.; Gaidos, Eric; Mace, Gregory N.; et al.; 2016, ApJ, 818 46.

"How to Constrain Your M Dwarf: measuring effective temperature, bolometric luminosity, mass, and radius"

Mann, Andrew W.; Feiden, Gregory A.; Gaidos, Eric; Boyajian, Tabetha; von Braun, Kaspar; 2015, ApJ, 804 64.

"Revised Photometric Passbands and Zero-Points for Photometry of Bright Stars" Mann, Andrew W.; von Braun, Kaspar; 2015, PASP 127 102.

"Prospecting in Ultracool Dwarfs: Measuring the Metallicities of Mid- and Late-M Dwarfs"

Mann, Andrew W.; Deacon, Niall R.; Gaidos, Eric; Ansdell, Megan; Brewer, John M.; Liu, Michael C.; Magnier, Eugene A.; Aller, Kimberly M.; 2014, AJ 147 160.

"Spectro-thermometry of M Dwarfs and Their Candidate Planets: Too Hot, Too Cool, or Just Right?"

Mann, Andrew W.; Gaidos, Eric; Ansdell, Megan; 2013, ApJ, 779 188.

"Testing the Metal of Late-Type Kepler Planet Hosts with Iron-Clad Methods"

Mann, Andrew W.; Gaidos, Eric; Kraus, Adam; Hilton, Eric; 2013, ApJ, 770

43.

"Prospecting in late-type dwarfs:

a calibration of infrared and visible spectroscopic metallicities of late-K and M dwarfs spanning $1.5~{\rm dex}$ "

Mann, Andrew W.; Brewer, John; Gaidos, Eric; Lépine, Sébastien; Hilton, Eric; AJ 2013, 145 52.

"They Might be Giants: luminosity classes, planet frequency, and planet-metallicity relation of the coolest Kepler target stars"

Mann, Andrew W.; Gaidos, Eric; Lépine, Sébastien; Hilton, Eric; 2012, ApJ, 753, 90.

"X-ray-optical classification of cluster mergers and the evolution of the cluster merger fraction"

Mann, Andrew W.; Ebeling, Harald; 2012, MNRAS 240, 2120.

"Ground-Based Sub-Millimagnitude CCD Photometry of Bright Stars using Snapshot Observations"

Mann, Andrew W.; Gaidos, Eric; Aldering Greg; 2011, PASP 123, 1273.

"The Invisible Majority? Evolution and Detection of Outer Planetary Systems without Gas Giants"

Mann, Andrew W.; Gaidos, Eric; Gaudi, B Scott; 2010, ApJ, 719, 1454.

PUBLICATION
WITH A
SIGNIFICANT
CONTRIBUTION

(17)

Publications "M Dwarf Activity in the Pan-STARRS 1 Medium-Deep Survey: First Catalog and With a Rotation Periods"

Kado-Fong, Erin; Williams, Peter K. G.; Mann, Andrew W.; et al.; Submitted to ApJ.

"Zodiacal Exoplanets in Time (ZEIT) II. A "Super-Earth" Orbiting a Young K Dwarf in the Pleiades Neighborhood"

Gaidos, Eric; Mann, Andrew W.; Rizzuto, Aaron; et al.; 2016, MNRAS, 1448.

"The Physical Mechanism Behind M Dwarf Metallicity Indicators and the Role of C and O Abundances"

Veyette, Mark J.; Muirhead, Philip S.; **Mann, Andrew W.**; Allard, France; 2016, ApJ, 828, 95.

"The Impact of Stellar Multiplicity on Planetary Systems. I. The Ruinous Influence of Close Binary Companions"

Kraus, Adam L.; Ireland, Michael J.; Huber, Daniel; **Mann, Andrew W.**; Dupuy, Trent J.; 2016, AJ, 152, 8.

"They are small worlds after all: revised properties of Kepler M dwarf stars and their planets"

Gaidos, E.; **Mann, Andrew W.**; Kraus, A. L.; Ireland, M.; 2016, MNRAS, 457, 2887.

"Radial Trends in IMF-sensitive Absorption Features in Two Early-type Galaxies: Evidence for Abundance-driven Gradients"

McConnell, Nicholas J.; Lu, Jessica R.; **Mann, Andrew W.**; 2016, ApJ, 821, 39.

"A Pan-STARRS 1 study of the relationship between wide binarity and planet occurrence in the Kepler field"

- Deacon, N. R.; Kraus, A. L.; **Mann, Andrew W.**; et al.; 2016, MNRAS, 455, 4212.
- "The Enigmatic and Ephemeral M Dwarf System KOI 6705: Cheshire Cat or Wild Goose?"
 - Gaidos, Eric; Mann, Andrew W.; Ansdell, Megan; 2016, ApJ, 817, 50.
- "Kepler-445, Kepler-446 and the Occurrence of Compact Multiples Orbiting Mid-M Dwarf Stars"
 - Muirhead, Philip S.; **Mann, Andrew W.**; Vanderburg, Andrew; et al.; 2015, ApJ, 801, 18.
- "The Near-ultraviolet Luminosity Function of Young, Early M-type Dwarf Stars" Ansdell, Megan; Gaidos, Eric; Mann, Andrew W.; et al.; 2015, 798, 41.
- "Trumpeting M dwarfs with CONCH-SHELL: a catalogue of nearby cool host-stars for habitable exoplanets and life"
 - Gaidos, Eric; Mann, Andrew W.; Lpine, S.; et. al.; 2014, MNRAS 433, 2561.
- "M Dwarf Metallicities and Giant Planet Occurrence: Ironing Out Uncertainties and Systematics"
 - Gaidos, Eric; Mann, Andrew W.; Ansdell, Megan; 2014, ApJ, 791, 54.
- "An Understanding of the Shoulder of Giants: Jovian Planets around Late K Dwarf Stars and the Trend with Stellar Mass"
 - Gaidos, Eric; Fischer, Debra A.; Mann, Andrew W.; et al.; 2013, ApJ, 771, 18.
- "Objects in Kepler's Mirror May be Larger than they Appear: Bias and Selection Effects in Transiting Planet Surveys"
 - Gaidos, Eric; Mann, Andrew W.; 2013, ApJ, 145, 52.
- "A Spectroscopic Catalog of the Brightest (J < 9) M Dwarfs in the Northern Sky" Lépine, Sébastien; Hilton, Eric; Mann, Andrew W.; Rojas-Ayala, Barbara; Wilde, Matthew; and Gaidos, Eric; 2013, AJ, 145, 102.
- "On the Nature of Small Planets around the Coolest Kepler Stars"
 Gaidos, Eric; Fischer, Debra A.; Mann, Andrew W.; Lépine, Sébastien; 2012, ApJ, 746 36.
- "Transit Analysis Package (TAP and autoKep): IDL Graphical User Interfaces for Extrasolar Planet Transit Photometry"
 - Gazak, J. Zachary; Johnson, John A.; Tonry, John; Eastman, Jason; Mann, Andrew W.; Agol, Eric; 2012, Advances in Astronomy, 30.
- 21 papers where my contribution was minor are not listed.