Andrea Kunder

Curriculum Vitae

Saint Martin's University
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Lacey, WA 98503
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Professional Appointments

Sept 2017 - present **Saint Martin's Univeristy;** Lacey, WA, USA
Associate Professor

Oct 2013 - Sep 2017 **Leibniz Institute für Astrophysik (AIP);** Potsdam, Germany
Post-doctoral Research Assistant

Oct 2009 -Sep 2013 **Cerro Tololo Inter-American Observatory;** La Serena, Chile
Post-doctoral Research Assistant

July-Sep 2009 **Dartmouth College,** Hanover, NH
Post-doctoral Fellow

Education

June 2009 **Dartmouth College;** Hanover, NH
PhD in Physics & Astronomy
Advisor: Dr. Brian C. Chaboyer
Thesis: RR Lyrae stars as tracers of stellar populations in the Galactic bulge and satellite galaxies

May 2003 **Willamette University;** Salem, OR
Bachlelor of Arts in Chemistry and German

2002 **Columbia University's Biosphere 2;** Oracle, AZ
Universe Semester; Researched RR Lyrae stars with local telescopes.

2000 - 2001 **Ludwig-Maximillians Universität München;** Munich, Germany
Immersion program in language, culture, and history.

Research Interests

The formation and evolution of Local Group galaxies and the Milky Way through detailed chemical and dynamical studies of individual stars; RR Lyrae stars, globular clusters and resolved stellar populations.

Honors/Awards

- 2023 M.J. Murdock Conference Best Physics & Engineering Student Poster Prize
- 2021 Lynwood W. Swanson Promise for Scientific Research Award ($10,000 award)
- 2020 M.J. Murdock Conference Best Physics & Engineering Student Poster Prize
- 2013 NOAO Science Excellence Award
- 2013 NOAO DECam Installation, Commissioning and Scientific Verification Team Award
- 2009 The Dartmouth College Arts and Sciences Graduate Student Research Presentation Award
- 2007 Honorable Mention Chambliss Award (AAS)
- Mary L. Collins Graduate Scholarship
- Blackman/Barber Scholarship (Biology, Chemistry, Physics)
- 2005 Dartmouth Science Poster Contest Winner

Principal Investigator Grants

2024 - 2027 **NSF Astronomy and Astrophysics Research Grant** (153,169 USD)
The disintegration of clusters and their contribution to the metal-poor bulge
(with Seattle University, Western Washington University, The College of Idaho)

2022 - 2024 **Research Across Institutions for Scientific Empowerment** (370,066 USD)
Characterizing the Tidal Disruption of Inner Galaxy Globular Clusters
(with Seattle University, Western Washington University, The College of Idaho)

2021 - 2022 **LSST "Kickstarter Grant Partnership Proposal"** (30,000 USD)
Characterizing the Tidal Disruptions of Inner Galaxy Clusters using LSST Passbands

2021 - 2023 **NSF Astronomy and Astrophysics Research Grant** (187,394 USD)
The BRAVA-RR Survey: uncovering an ancient Spheroidal Bulge in the Milky Way

2018 - 2020 **Murdock College Research Program for Physical Sciences grant** (63,000 USD)
Bulge Radial Velocity Assay – RR Lyrae Survey: Mapping the Bulge with RR Lyrae Stars.

2016 - 2017 **Deutsche Forschungsgemeinschaft Science Grant** (269,650 Euros)
Before the Bar: The Hidden Bulge of the Milky Way

2005 **Dartmouth Space Grant Graduate Fellowships**
Research Assistantships in Galactic and Extragalactic Astronomy

Invited Conference Presentations

Feb 2021 **Galactic Centre and Inner Galaxy**
European Union Framework Programme Horizon 2020/2021
Keynote talk: "RR Lyrae distribution and kinematics: what these stars represent"

Oct 2019 **Frontiers of Classical Pulsators - Theory and Observations**
NSF, New Mexico State University, Apache Point Observatory
Keynote talk: "Kinematics of the bulge RR Lyrae stars"

Dec 2018 **The Galactic Bulge at the crossroads**
European Southern Observatory (ESO)
Review talk: "Bulge structure and kinematics"

May 2016 **Astronomical Distance Determination in the Space Age**
The Kavli Institute for Astronomy and Astrophysics at Peking University
Review talk: "Impact of RR Lyrae stars in building-up the Galactic bulge"

June 2014 **The Evolution of Stellar Populations in Globular Clusters & Early Type Galaxies**
Yonsei University, Seoul, Korea
Review talk: "RR Lyrae stars: connection to the Milky Way and Dwarf Galaxies"

Invited Colloquium Presentations

Dec 2023 **NSF's NOIRLab, La Serena, Chile**
NSF's NOIRLab South Colloquium Series

Dec 2019 **Johns Hopkins University/Space Telescope Science Institute**
oint JHU/STScI Colloquium

Oct 2019 **Reed College**, *Physics Seminar*

Feb 2019 **The University of Washington**, *Department of Astronomy Colloquium*

Oct 2018 **The University of Puget Sound**, *Physics Seminar*

Apr 2016 **Finnish Centre for Astronomy with ESO (FINCA)**, *Astrophysics Colloquium*

May 2016 **INAF - Osservatorio Astronomico di Bologna**, *Astrophysical Seminar*

Professional Activities

2024	**NSF Panel Astrophysics Reviewer** Made recommendations to NSF on which astrophysics grants should be funded
2023	**Nancy Grace Roman Space Telescope Panelist and Proposal Reviewer** Read, grade, review and write comments for proposals submitted to Roman
2023	**Hubble Space Telescope Panelist and Proposal Reviewer**
2022	**Hubble Space Telescope Panelist and Proposal Reviewer** Read, grade, review and write comments for proposals submitted to Hubble
2021	**Rubin Observatory's Data Preview 0 Delegate** Test simulated LSST-like data sets and the Rubin Science Platform (RSP)
2021	**Gemini Large and Long Program Telescope Allocation Committee** Made recommendations to Gemini Telescope on what proposals should be allocated
2020	**NSF Panel Astrophysics Reviewer** Made recommendations to NSF on which astrophysics grants should be funded
2018 - 2020	**Telescope Access Program, Chineese Academy of Sciences** Made recommendations to Chineese Academy of Sciences on which telescope proposals should be funded
2015 - 2017	**AIP Gender Equality Deputy** Led Institute-wide discussions on Equity and Inequality in Astronomy and work with management to improve gender equality in the work environment
2013 - 2014	**Scientific Conference Organizer and Proceedings Editor** "Fifty Years of Wide Field Studies in the Southern Hemisphere: Resolved Stellar Populations in the Galactic Bulge and the Magellanic Clouds", Edited by S. Points & A. Kunder: Astronomical Society of the Pacific, Vol 491, 2014
2012 - 2013	**DECam Support Instrument Scientist** commission DECam (optical imager), lead documentation
2009 - 2013	**Mosaic2 Instrument Scientist** guided Mosaic2 users (optical imager)
2010 - 2012	**NOAO Data Archive Evaluator** evaluated the quality of the NOAO Mosaic2 pipeline
2011	**NEWFIRM Support Instrument Scientist** guided NEWFIRM users (IR imager)
2011 - present	**Referee** AJ, ApJ, A&A, MNRAS, Science

Teaching Activities

Courses taught:

PHY171: Introductory Calculus-based Physics I – 4 credits
PHY172: Introductory Calculus-based Physics II – 4 credits
PHY399: Explorations in Physics – 2 credits
MEM695: Special Topics in Astrophysics – 3 credits

PHY365: Astrophysics – 3 credits
PHY110: Intro Astronomy with Lab (Core Natural Science with Lab) – 5 credits
PHY314: Classical Mechanics – 4 credits
PHY141: Introductory Algebra-based Physics I – 4 credits
PHY142: Introductory Algebra-based Physics II – 4 credits

May-Aug 2022 **Summer Student Research Workshop, Saint Martin's, USA**
May-Aug 2021 **Summer Student Research Workshop, Saint Martin's, USA**
Co-led workshop designed for students to go deeper into the scientific process, ethics in research, and methodological approaches to research.

July 2018 **New Physics and Astronomy Faculty Workshop, Baltimore, MD**
Active learning training by American Association of Physics Teachers

2015 - 2016 **University of Potsdam, Potsdam, Germany**
Co-Teacher for "Einführung in die Astronomie" (held lectures once a week)

Feb 2016 **Berlin Zeiss Planetarium, Berlin, Germany**
Led training evening on the formation and evolution of the Milky Way Galaxy

Oct 2015 **Lecturer during the Wilhelm and Else-Heraeus-Service Teacher Training**
Instructed Astronomy High School Teachers on latest Milky Way Galaxy science

2013 - 2014 **University of Potsdam, Potsdam, Germany**
Substitute Teacher "Einführung in die Astronomie" (held lectures once per month)

2010 - 2013 **REU Program Mentor**
instructed an REU student in 2010, 2011 and 2013

2010 - 2011 **REU Program Leader**
chaperoned and organized field trips in 2010 and 2011

2007 **Dartmouth College WISP Mentor**
Supervised two undergraduate students; promoted the results of our completed RR Lyrae lightcurves at the July 2007 Stellar Pulsation Conference

University and Community Service

2017 - present **Boys and Girls club leader for SMU physics activities**
2017 - present **Faculty Advisor of Physics club**
2017 - present **Faculty lead for SMU students attending Murdock conference**
Aug 2020 **Lead participant for Timberland Library's "Zooming through the stars"**
Ongoing **Reviewer for international journals (ApJ, ApJL, A&A, MNRAS, Science)**

Undergraduate Mentorship

Summer 2018 Dylon Maertens, *Alex Tilton*† (Mechanical Engineering), *Jonathan Ogata*† (Math)
Summer 2019 *Emma Murari*† (Biology), Emilie Boren (Chemistry), *Jonathan Ogata*† (Math)
Spring 2020 *Brianna Huhmann*† (Mechanical Engineering)
Summer 2020 Andrew Schulz (Computer Science), Riley Crabb (Mechanical Engineering), Evan Butler (Olympia High School)
Summer 2021 *Francisca Anunobi*† (Mechanical Engineering), *Rebekah Kuss*† (Math), *Josh Schulz*† (Computer Science)
Summer 2022 Kaylah Tibbits (Mechanical Engineering), John Lane (Mechanical Engineering), *Rian Clear*† (Excercise Science), *Rebekah Kuss*† (Math)

Summer 2023 Claire Skaggs (Mechanical Engineering), Macy Ball (Mechanical Engineering), Carlos Campos (Mechanical Engineering), Michael Rivet (Math), Evan Butler (Physics)

Summer 2024 *Sam Morris*† (Math), Audrey Hays (Biology), Christian Le (Chemistry)

†*students either accepted to, currently in, or have completed graduate programs*
** 85% of these undergraduate students are underrepresented students in the sciences, composed of students that are from a group that is historically underrepresented in STEM (particularly first-generation students, military veterans and women).

Observational Experience

BLANCO 4.1m:

12 nights of observing with DECam, 5 nights leader of DECam commissioning team.
30 nights of observing with Mosaic2. Extensive use of Mosaic2 wide-field imager.
10 nights of observing with NEWFIRM. Etended use of NEWFIRM wide-field imager.

AAT 4m: 20 nights of observing with AAOmega (multi-fiber spectrograph).
SOAR 4.2m: 4 nights of observing with SOI (optical imager).
MDM 1.3m: 36 nights of observing with optical CCD imager and infrared imager
MDM 2.4m: 2 nights observing with single slit moderate resolution spectrograph
SMARTS 0.9m: - 28 nights nights of observing with the Tektronix.
SMARTS 1.0m: 26 nights observing with a 4K CCD imager
WIYN 0.9m: 8 nights of observing with optical CCD imager, S2KB.

Photometry: Extensive experience in processing and reducing time-resolved CCD data obtained Mosaic2, S2KB, Templeton and Y4KCam imagers. Extensive experience in working with multi-extension images, the iraf package, mscred, and making calibration files to correct astrometric solutions, remove cross talk, and mask bad pixels. Extensive experience with standard star observations. Extended use of Daophot II to deal with crowded field photometry.

Spectroscopy: Extensive experience processing and reducing Hydra data from the Blanco 4m Telescope, AAOmega data from the Anglo-Australian Telescope, and optical Cassegrain medium-resolution Spectra from the 2.3m Vainu Bappu Telescope; Kavalur, India.

Career Breaks

Maternity leave: Jan 2012 - June 2012
Maternity leave: Sept 2014 - Feb 2015
Maternity leave: Aug 2016 - Sep 2016, Nov 2016 - Feb 2017

Refereed Publications

* undergraduate student publications

92. **Andrea Kunder**, Prudil, Z., Skaggs, C.*, Reggiani, H., Nataf, D.M., Hughes, J., Covey, K., Devine, K. (2024) "The Galactic Bulge exploration III.: Calcium Triplet Metallicities for RR Lyrae Stars" *The Astronomical Journal*, **168**, 139

91. Prudil, Z., Smolec, R., **Andrea Kunder**, Koch-Hansen, A.J., Dékány, I. (2024) "The Galactic Bulge exploration II.: Line-of-sight velocity templates for single-mode RR Lyrae stars" *Astronomy & Astrophysics*, **685**, 153

90. Prudil, Z., **Andrea Kunder**, Dékány, I., Koch-Hansen, A.J. (2024) "The Galactic Bulge exploration I.: The period-absolute magnitude-metallicity relations for RR Lyrae stars for G_{BP}, V, G, G_{RP}, I, J, H, and K_s passbands using Gaia DR3 parallaxes" *Astronomy & Astrophysics*, **684**, 176

89. Butler, E.*, **Andrea Kunder**, Prudil, Z., Covey, K., Hughes, J., Prudil, Z., Joyce, M., Simion, I.T., Johnson, C.I., Ball, M.*, Campos, C.*, Larson, K.A., Koch-Hansen, A.J., Marchetti, T., Rich, M.R., Clarkson, W.I., Pilachowski, C.A., Devine, K., Kuss, R.* (2024) "RR Lyrae Stars Belonging to the Candidate Globular Cluster Patchick 99" *The Astrophysical Journal Letters*, **963**, 33

88. Marchetti, T., Joyce M., Johnson, C.I., Rich, R.M., Clarkson, W., **Andrea Kunder** Simion, I.T., Pilachowski, C.A. (2024) "The Blanco DECam Bulge Survey (BDBS): VIII. Chemo-kinematics in the southern Galactic bulge from 2.3 million red clump stars with Gaia DR3 proper motions" *Astronomy & Astrophysics*, **682**, 96

87. **Andrea Kunder**, Prudil, Z., Covey, K., Hughes, J., Joyce, M., Simion, I., Kuss, R.*, Campos, C.*, Johnson, C.I., Pilachowski, C.A., Larson, K.A., Koch-Hansen, A.J., Marchetti, T., Rich, M.R., Butler, E.*, Clarkson, W.I., Rivet, M.*, Devine, K., Vivas, K.A., Perren, G.I., Soto, M., Silva, E.* (2024), "The Milky Way Bulge Extra-tidal Star Survey: BH 261 (AL 3)", *The Astronomical Journal*, **167**, 21

86. Soto, M., Kuijken, K., Rich, R. M., Clarkson, W.I., Nilo C., José L., Fernández-Trincado, J.G., Contreras Ramos, R., **Andrea Kunder**, Baravalle, L.D., Alonso, M. V., Simion, I.T., Johnson, C.I., Vieira, K. (2023) "HST proper motions on the far side of the Galactic bar-data" *Monthly Notices of the Royal Astronomical Society*, **524**, 224

85. Kader, J.A, Pilachowski, C. A., Johnson, C. I., Rich, R. M., Young, M. D., Simion, I.T., Clarkson, W. I., Michael, S., **Andrea Kunder**, Vivas, A.K., Koch-Hansen, A.J., Marchetti, T., (2023) "Blanco DECam Bulge Survey (BDBS). VI. Extinction Maps Toward Southern Galactic Bulge Globular Clusters" *The Astrophysical Journal*, **950**, 126

84. Kader, J.A, Pilachowski, C. A., Johnson, C. I., Rich, R. M., Young, M. D., Simion, I.T., Clarkson, W. I., Michael, S., **Andrea Kunder**, Vivas, A.K., Koch-Hansen, A.J., Marchetti, T., (2022) "Blanco DECam Bulge Survey (BDBS). VII. Multiple Populations in Globular Clusters of the Galactic Bulge" *The Astrophysical Journal*, **940**, 76

83. Marchetti, T., Johnson, C. I., Joyce, M., Rich, R. M., Simion, I., Young, M. D., Clarkson, W. I., Pilachowski, C. A., Michael, S., **Andrea Kunder**, Koch-Hansen, A.J. (2022) "Blanco DECam Bulge Survey (BDBS) V. Cleaning the foreground populations from Galactic bulge colour-magnitude diagrams using Gaia EDR3" *Astronomy & Astrophysics*, **664**, 124

82. Johnson, C.I., Rich, R. M., Simion, I. T., Young, M. D., Clarkson, W. I., Pilachowski, C. A., Michael, S., Marchetti, T., Soto, M., **Andrea Kunder**, Koch-Hansen, A. J., Vivas, K.,A., Joyce, M., Shen, J., Osmond, A. (2022) "Blanco DECam Bulge Survey (BDBS) IV: Metallicity distributions and bulge structure from 2.6 million red clump stars" *Monthly Notices of the Royal Astronomical Society*, **515**, 1469

81. **Andrea Kunder** (2022) "RR Lyrae variables as tracers of the Galactic bulge kinematic structure" *Universe*, 8, 206

***80. Andrea Kunder**, Crabb, R.E.*, Debattista, V.P., Koch-Hansen, A., Huhmann, B.M.* (2021), "Spectroscopic Observations of Obscured Populations in the Inner Galaxy: 2MASS-GC02, Terzan 4,

and the 200 km s^{-1} stellar peak" *The Astronomical Journal*, **162**, 86

79. Lim, D., Koch-Hansen, A. J. , Chung, C., Johnson, C.I., **Andrea Kunder**, Simion, I. T. , Rich, R. M., Clarkson, W. I., Pilachowski, C. A., Michael, A., Vivas, A.K. and Young, M.D. (2021) "Blanco DECam Bulge Survey (BDBS). III. A new view of the double red clump in the Milky Way bulge through luminosity and color distribution" *Astronomy & Astrophysics*, **647**, 34

78. Johnson, C.I., Rich, R.M., Young, M.D., Simion, I.T., Clarkson, W.I., Pilachowski, C.A., Michael, S., **Andrea Kunder**, Koch, A., Vivas, K.A. (2020) "Blanco DECam Bulge Survey (BDBS) II: project performance, data analysis, and early science results" *Monthly Notices of the Royal Astronomical Society*, **499**, 2357

77. Rich, R.M., Johnson, C.I., Young, M., Simion, I.T., Clarkson, W.I., Pilachowski, C., Michael, S., **Andrea Kunder**, Vivas, K.A., Koch, A., Marchetti, T., Ibata, R., Martin, N., Robin, A.C., Lagarde, N., Collins, M., Ivezić, Z. de Propris, R., Shen, J., Gerhard, O., Soto, M. (2020) "The Blanco DECam bulge survey. I. The survey description and early results" *Monthly Notices of the Royal Astronomical Society*, **499**, 2340

76. G. Guiglion, G. Matijevič, A. B. A. Queiroz, M. Valentini, M. Steinmetz, C. Chiappini, E. K. Grebel, P. J. McMillan, G. Kordopatis, **Andrea Kunder**, T. Zwitter, A. Khalatyan, F. Anders, H. Enke, I. Minchev, G. Monari, R. F. G. Wyse, O. Bienaymé, J. Bland-Hawthorn, B. K. Gibson, J. F. Navarro, Q. Parker, W. Reid, G. M. Seabroke and A. Siebert (2020), "The RAdial Velocity Experiment (RAVE): Parameterisation of RAVE spectra based on convolutional neural networks" *Astronomy & Astrophysics*, **644**, 168

***75. Andrea Kunder** & Butler, E.* (2020), "Spectroscopic Analysis of the Bulge Globular Cluster ESO 456-SC38" *The Astronomical Journal*, **160**, 241

74. Savino, A., Koch, A., Prudil, Z., **Andrea Kunder**, Smolec, R. (2020) "The age of the Milky Way inner stellar spheroid from RR Lyrae population synthesis" *Astronomy & Astrophysics*, **641**, 96

73. Holmbeck, E. M., Hansen, T. T., Beers, T. C., Placco, V. M., Whitten, D. D., Rasmussen, K. C., Roederer, I. U., **Andrea Kunder** and 18 coauthors. (2020) "The R-Process Alliance: Fourth Data Release from the Search for R-process-enhanced Stars in the Galactic Halo" *The Astrophysical Journal Supplement Series*, **249**, 30

72. Steinmetz, M., Guiglion, G., McMillan, P. J., Matijevič, G., Enke, H., Kordopatis, G., Zwitter, T., Valentini, M., Chiappini, C., Casagrande, L., **Andrea Kunder** and 46 coauthors. (2020) "The Sixth Data Release of the Radial Velocity Experiment (RAVE). II. Stellar Atmospheric Parameters, Chemical Abundances, and Distances" *The Astronomical Journal*, **160**, 83

71. Steinmetz, M., Matijevič, G., Enke, H., Zwitter, T., Guiglion, G., McMillan, P. J., Kordopatis, G., Valentini, M., Chiappini, C., Casagrande, L., **Andrea Kunder** and 46 coauthors. (2020) "The Sixth Data Release of the Radial Velocity Experiment (RAVE). I. Survey Description, Spectra, and Radial Velocities" *The Astronomical Journal*, **160**, 82

70. Cullinane, L. R., Mackey, A. D., Da Costa, G. S., Koposov, S. E., Belokurov, V., Erkal, D., Koch, A., **Andrea Kunder**, Nataf, D. M. (2020) "The Magellanic Edges Survey I: Description and first results" *Monthly Notices of the Royal Astronomical Society*, **497**, 3055

69. Bono, G., Braga, V. F., Crestani, J., Fabrizio, M., Sneden, C., Marconi, M., Preston, G. W., Mullen, J. P., Gilligan, C. K., **Andrea Kunder**, and 31 coauthors (2020) "On the Metamorphosis of the Bailey Diagram for RR Lyrae Stars" The Astrophysical Journal, **896**, 15

***68. Andrea Kunder**, Pérez-Villegas, A., Rich, R. M., Ogata, J.*, Murari, E.*, Boren, E.*, Johnson, C. I., Nataf, D., and 6 coauthors (2020) "The Bulge Radial Velocity Assay for RR Lyrae Stars (BRAVA-RR) DR2: A Bimodal Bulge?" The Astronomical Journal, **159**, 270

67. Prudil, Z., Dékány, I., Grebel, E. K., Andrea Kunder (2020) "Evidence for Galactic disc RR Lyrae stars in the solar neighbourhood" *Astronomy & Astrophysics*, **492**, 3408

66. Prudil, Z., Dékány, I., Smolec, R., Catelan, M., Grebel, E. K., **Andrea Kunder** (2020) "Humps and bumps: the effects of shocks on the optical light curves of fundamental-mode RR Lyrae stars" Astronomy & Astrophysics, **635**, 66

65. Arentsen, A., Starkenburg, E., Martin, N. F., Hill, V., Ibata, R., **Andrea Kunder**, Schultheis, M., Venn, K. A., Zucker, D. B., Aguado, D., Carlberg, R., González Hernández, J. I., Lardo, C., Longeard, N., Malhan, K., Navarro, J. F., Sánchez-Janssen, R., Sestito, F., Thomas, G., Youakim, K. Lewis, G. F., Simpson, J. D., Wan, Z. (2020) "The Pristine Inner Galaxy Survey (PIGS) I: tracing the kinematics of metal-poor stars in the Galactic bulge" *Monthly Notices of the Royal Astronomical Society*, **491**, 11

64. Soto, M., Barbá, R., Minniti, D., **Kunder, Andrea**, Majaess, D., Nilo-Castellón, J. L., Alonso-García, J., Leone, G., Morelli, L., Haikala, L., Firpo, V., Lucas, P., Emerson, J. P., Bidin, C. Moni, Geisler, D., Saito, R. K., Gurovich, S., Ramos, R. Contreras, Rejkuba, M., Barbieri, M. Roman-Lopes, A., Hempel, M., Alonso, M. V., Baravalle, L. D., Borissova, J., Kurtev, R., Milla, F. (2019) "A Color-Excess Extinction map of the Southern Galactic disk from the VVV and GLIMPSE Surveys" *Monthly Notices of the Royal Astronomical Society*, **1719**, 1

***63. Kunder, Andrea**, Tilton, A.*, Maertens, D.*, Ogata, J.*, Nataf, D., Rich, R. M., Johnson, C.I., Gilligan, C., Chaboyer, B. (2019) "Are the double-mode bulge RR Lyrae stars with identical period-ratios the relic of a disrupted stellar system?" *The Astrophysical Journal Letters*, **877**, 17

62. Sakari, C. M., Roederer, I. U., Placco, V. M., Beers, T. C., Ezzeddine, R., Frebel, A., Hansen, T., Sneden, C., Cowan, J.J., Wallerstein, G., Farrell, E.M., Venn, K. A., Matijevic, G., Wyse, R.F. G., Bland-Hawthorn, J., Chiappini, C., Freeman, K. C., Gibson, B. K., Grebel, E. K., Helmi, A., Kordopatis, G., **Kunder, Andrea**, Navarro, J., Reid, W., Seabroke, G., Steinmetz, M., Watson, F. (2019) "The R-Process Alliance: Discovery of a Low-α, r-process-enhanced Metal-poor Star in the Galactic Halo" *The Astrophysical Journal*, **874**, 148

61. Saha, A., Vivas, K. A., Olszewski, E.W., Smith, V., Olsen, K., Blum, R., Valdes, F., Claver, J., Calamida, A., Walker, A.R., Matheson, T., Narayan, G., Soraisam, M., Cunha, K., Axelrod, T., Bloom, J.S., Cenko, S.B., Frye, B., Juric, M., Kaleida, C., **Kunder, Andrea**, Miller, A., Nidever, D., Ridgway, S. (2019) "Mapping the Interstellar Reddening and Extinction toward Baade's Window Using Minimum Light Colors of ab-type RR Lyrae Stars: Revelations from the De-reddened Color-Magnitude Diagrams" *The Astrophysical Journal*, **874**, 30

60. Sakari, C. M., Placco, V. M., Farrell, E. M., Roederer, I. U., Wallerstein, G., Beers, T. C., Ezzeddine, R., Frebel, A., Hansen, T., Holmbeck, E. M., Sneden, C., Cowan, J. J., Venn, K. A., Davis, C. E., Matijevič, G., Wyse, R. F. G., Bland-HawthKunder, Andreaorn, J., Chiappini, C., Freeman, K. C., Gibson, B. K., Grebel, E. K., Helmi, A., Kordopatis, G., **Kunder, Andrea**, Navarro, J., Reid, W., Seabroke, G., Steinmetz, M., Watson, F. (2018) "The R-Process Alliance: First Release from

the Northern Search for r-process-enhanced Metal-poor Stars in the Galactic Halo" *The Astrophysical Journal*, **868**, 110

59. **Kunder, Andrea**, Valenti, E., Dall'Ora, M., Pietrukowicz, P., Sneden, C., Bono, G., Braga, V. F., Ferraro, I., Fiorentino, G., Iannicola, G., Marconi, M., Martínez-Vázquez, C. E., Monelli, M., Musella, I., Ripepi, V., Salaris, M., Stetson, P. B. (2018) "Impact of Distance Determinations on Galactic Structure. II. Old Tracers" *Space Science Reviews*, **214**, 214

58. Wojno, J., Kordopatis, G., Steinmetz, M., McMillan, P., Binney, J., Famaey, B., Monari, G., Minchev, I., Wyse, R. F. G., Antoja, T., Siebert, A., Carrillo, I., Bland-Hawthorn, J., Grebel, E. K., Zwitter, T., Bienaymé, O., Gibson, B., **Kunder, Andrea**, Munari, U., Navarro, J., Parker, Q., Reid, W., Seabroke, G. (2018) "Correlations between age, kinematics, and chemistry as seen by the RAVE survey" *Monthly Notices of the Royal Astronomical Society*, **477**, 5612

57. McMillan, P. J., Kordopatis, G., **Kunder, Andrea**, Binney, J., Wojno, J., Zwitter, T., Steinmetz, M., Bland-Hawthorn, J., Gibson, B. K., Gilmore, G., Grebel, E. K., Helmi, A., Munari, U., Navarro, J. F., Parker, Q. A., Seabroke, G., Watson, F., Wyse, R. F. G. (2018) "Improved distances and ages for stars common to TGAS and RAVE" (2018) *Monthly Notices of the Royal Astronomical Society*, **477**, 5279

56. Sysoliatina, K., Just, A., Golubov, O., Parker, Q. A., Grebel, E. K., Kordopatis, G., Zwitter, T., Bland-Hawthorn, J., Gibson, B. K., **Kunder, Andrea**, Munari, U., Navarro, J., Reid, W., Seabroke, G., Steinmetz, M., Watson, F., (2018) "The local rotation curve of the Milky Way based on SEGUE and RAVE data" *Astronomy & Astrophysics*, **614**, 63

***55. Kunder, Andrea**, Mills, A.*, Edgecomb, J.*, Thomas, M.*, Schilter, L.*, Boyle, C.*, Parker, S., Bellevue, G., Rich, R. M., Koch, A., Johnson, C. I., Nataf, D. M. (2018) "Radial Velocities of RR Lyrae Stars in and around NGC 6441" *The Astronomical Journal*, **155**, 171

54. Carrillo, I., Minchev, I., Kordopatis, G., Steinmetz, M., Binney, J., Anders, F., Bienaymé, O., Bland-Hawthorn, J., Famaey, B., Freeman, K. C., Gilmore, G., Gibson, B. K., Grebel, E. K., Helmi, A., Just, A., **Kunder, Andrea**, McMillan, P., Monari, G., Munari, U., Navarro, J., Parker, Q. A., Reid, W., Seabroke, G., Sharma, S., Siebert, A., Watson, F., Wojno, J., Wyse, R. F. G., Zwitter, T. (2018) "Is the Milky Way still breathing? RAVE-Gaia streaming motions" *Monthly Notices of the Royal Astronomical Society*, **475**, 2679

53. Koch, A., Hansen, T., **Kunder, Andrea** (2018) "Detailed chemical abundance analysis of the thick disk star cluster Gaia 1" *Astronomy & Astrophysics*, **609**, 13

52. Koch, A., **Kunder, Andrea**, Wojno, J. (2017) "Spectroscopic confirmation of the low-latitude object FSR 1716 as an old globular cluster" *Astronomy & Astrophysics*, **605**, 128

51. Koch, A., Hansen, C., **Kunder, Andrea** (2017) "Spectroscopic study of the elusive globular cluster ESO452-SC11 and its surroundings" *Astronomy & Astrophysics*, **604**, 41

50. Casey, A.R., Hawkins, K., Hogg, D.W., Ness, M., Walter-Rix, H., Kordopatis, G. **Kunder, Andrea** + 20 co-authors "The RAVE-on catalog of stellar atmospheric parameters and chemical abundances for chemo-dynamic studies in the Gaia era" (2017) *The Astrophysical Journal*, **840**, 59

49. Vivas, A.K., Saha, A., Olsen, K., Blum, R., Olszewski, E.W., Claver, J., Valdes, F., Axelrod, T., Kaleida, C., **Kunder, Andrea**, Narayan, G., Matheson, T., Walker, A. (2017) "Absolute Magnitudes

and Colors of RR Lyrae Stars in DECam Passbands from Photometry of the Globular Cluster M5" *The Astronomical Journal*, **154**, 85

48. Walker, A. R., Andreuzzi, G., Martínez-Vázquez, C. E., **Kunder, Andrea**, Stetson, P. B., Cassisi, S., Monelli, M., Bono, G., Dall'Ora, M., Vivas, A. K. (2017) "A Photometric Study of the Outer Halo Globular Cluster NGC 5824" *The Astronomical Journal*, **154**, 8

47. Matijevic, G., Chiappini, C., Grebel, E. K., Wyse, R. F. G., Zwitter, T., Bienayme, O., Bland-Hawthorn, J., Freeman, K. C., Gibson, B. K., Gilmore, G., Helmi, A., Kordopatis, G., **Kunder, Andrea**, Munari, U., Navarro, J. F., Parker, Q. A., Reid, W., Seabroke, G., Siviero, A., Steinmetz, M., Watson, F. (2017) "Very metal-poor stars observed by the RAVE survey" *Astronomy & Astrophysics*, **604**, 41

46. Zhou, Y., Shen, J., Liu, C., Li, Z., Mao, S., **Kunder, Andrea**, Rich, R.M., Zasowski, G., Fernandez-Trincado, J. G., Majewski, S. R., Lin, C.-C., Geisler, D., Tang, B., Villanova, S., Roman-Lopes, A., Schultheis, M., Nidever, D.L., Meza, A., Pan, K., Bizyaev, D. V. (2017) "Chemical Abundances and Ages of the Bulge Stars in APOGEE high-velocity Peaks" *The Astrophysical Journal*, **847**, 74

45. Jofre, P., Traven, G., Hawkins, K., Gilmore, G., Sanders, J. L., Maedler, T., Steinmetz, M., **Kunder, Andrea**, Kordopatis, G., McMillan, P., Bienaymé, O., Bland-Hawthorn, J., Gibson, B. K., Grebel, E. K., Munari, U., Navarro, J., Parker, Q., Reid, W., Seabroke, G., Zwitter, T. (2017) "Climbing the cosmic ladder with stellar twins in RAVE with Gaia" (2017) *Monthly Notices of the Royal Astronomical Society*, **472**, 2517

44. Wojno, J., Kordopatis, G., Piffl, T., Binney, J., Steinmetz, M., Matijevic, G., Bland-Hawthorn, J., Sharma, S., McMillan, P., Watson, F., Reid, W., **Kunder, Andrea**, Enke, H., Grebel, E.K., Seabroke, G., Wyse, R.F. G., Zwitter, T., Bienayme, O., Freeman, K.C., Gibson, B.K., Gilmore, G., Helmi, A., Munari, U., Navarro, J.F., Parker, Q.A., Siebert, A. (2017) "The selection function of the RAVE survey" *Monthly Notices of the Royal Astronomical Society* **468,** 2368

43. Nidever, A. L., Olsen, K., Walker, A. R., Vivas, A. K., Blum, R. D., Kaleida, C., Choi, Y., Conn, B. C., Gruendl, R. A., Bell, E. F., Besla, G., Muñoz, R. R., Gallart, C., Martin, N. F., Olszewski, E. W., Saha, A., Monachesi, A., Monelli, M., de Boer, T. J. L., Johnson, L. C., Zaritsky, D., Stringfellow, G. S., van der Marel, R. P., Cioni, M.-R. L., Jin, S., Majewski, S. R., Martinez-Delgado, D., Monteagudo, L., Noël, N. E. D., Bernard, E. J., **Kunder, Andrea**, Chu, Y.-H., Bell, C. P. M., Santana, F., Frechem, J., Medina, G. E., Parkash, V., Serón N., J. C., Hayes, Christian (2017) "SMASH: Survey of the MAgellanic Stellar History" *The Astronomical Journal*, **154**, 199

42. Conrad, C., Scholz, R.-D., Kharchenko, N. V., Piskunov, A. E., Röser, S., Schilbach, E., de Jong, R. S., Schnurr, O., Steinmetz, M., Grebel, E. K., Zwitter, T., Bienaymé, O., Bland-Hawthorn, J., Gibson, B. K., Gilmore, G., Kordopatis, G., **Kunder, Andrea**, Navarro, J. F., Parker, Q., Reid, W., Seabroke, G., Siviero, A., Watson, F., Wyse, R. (2017) "A RAVE investigation on Galactic open clusters . II. Open cluster pairs, groups and complexes" *Astronomy & Astrophysics*, **600**, 106

41. Valentini, M., Chiappini, C., Davies, G. R., Elsworth, Y. P., Mosser, B., Lund, M. N., Miglio, A., Chaplin, W. J., Rodrigues, T. S., Boeche, C., Steinmetz, M., Matijevic, G., Kordopatis, G., Bland-Hawthorn, J., Munari, U., Bienaymé, O., Freeman, K. C., Gibson, B. K., Gilmore, G., Grebel, E. K., Helmi, A., **Kunder, Andrea**, McMillan, P., Navarro, J., Parker, Q. A., Reid, W., Seabroke, G., Sharma, S., Siviero, A., Watson, F., Wyse, R. F. G., Zwitter, T., Mott, A. (2017) "RAVE stars in K2. I. Improving RAVE red giants spectroscopy using asteroseismology from K2 Campaign 1" *Astronomy*

& Astrophysics, **600**, 66

40. Zerjal, M., Zwitter, T., Matijevic, G., Grebel, E.K., Kordopatis, G., Munari, U., Seabroke, G., Steinmetz, M., Wojno, J., Bienayme, O., Bland-Hawthorn, J., Conrad, C., Freeman, K. C., Gibson, B. K., Gilmore, G., **Kunder, Andrea**, J. Navarro, Q.A., Parker, W. Reid, A. Siviero, F.G. Watson, R.F. G. Wyse, (2017) "Chromospherically Active Stars in the RAVE Survey. II. Young Dwarfs in the Solar Neighborhood" *The Astrophysical Journal*, **835**, 61

39. **Kunder, Andrea** + RAVE collaboration (2017) "The Radial Velocity Experiment (RAVE): Fifth Data Release" *The Astronomical Journal*, **153**, 75

38. Hansen, C.J., Rich, R.M., Koch, A., Xu, S., **Kunder, Andrea**, Ludwig, H.-G. (2016) "Chemical abundances in a high-velocity RR Lyrae star near the bulge" *Astronomy & Astrophysics* **590,** 39

37. Anguiano, B., De Silva, G. M., Freeman, K., Da Costa, G. S., Zwitter, T., Quillen, A. C., Zucker, D. B., Navarro, J. F., **Kunder, Andrea**, Siebert, A., Wyse, R. F. G., Grebel, E. K., Kordopatis, G., Gibson, B. K., Seabroke, G., Sharma, S., Wojno, J., Bland-Hawthorn, J., Parker, Q. A., Steinmetz, M., Boeche, C., Gilmore, G., Bienaymé, O., Reid, W., Watson, F. (2016): "Identification of Globular Cluster Stars in RAVE data II: Extended tidal debris around NGC 3201" *Monthly Notices of the Royal Astronomical Society* **457,** 2078

36. **Kunder, Andrea**, Rich, R.M., Koch, A., Storm, J., Nataf, D.M., De Propris, R., Walker, A., Bono, G., Johnson, C.I., Shen, J., Li, Z.-Y. (2016): "Before the Bar: Kinematic Detection of a Spheroidal Metal-poor Bulge Component" *The Astrophysical Journal Letters* **821,** 25

35. Nataf, D.M., Gonzalez, O.A., Casagrande, L., Zasowski, G., Wegg, C., Wolf, C., **Kunder, Andrea**, Alonso-Garcia, J. Minniti, D. Rejkuba, M., Saito, R.K., Valenti, E., Zoccali, M., Poleski, R., Pietrzynski, G., Skowron, J., Soszynski, I., Szymanski, M.K., Udalski, A., Ulaczyk, K. & Wyrzykowski, L. (2016) "Interstellar Extinction Curve Variations Toward the Inner Milky Way: A Challenge to Observational Cosmology" *Monthly Notices of the Royal Astronomical Society* **456,** 2692

34. **Kunder, Andrea**, Rich, R.M., Hawkins, K., Poleski, R., Storm, J., Johnson, C.I., Shen, J., Li, Z.-Y., Cordero, M.J., Nataf, D.M., Bono, G., Walker, A., Koch, A., De Propris, R., Udalski, A., Szymanski, M., Soszynski, I., Pietrzynski, G., Ulaczyk, K., Wyrzykowski, L., Pietrukowicz, P., Skowron, J., Kozlowski, S. & Mroz, P. (2015): "A high-velocity bulge RR Lyrae variable on a halo-like orbit" *The Astrophysical Journal Letters* **808,** 12

33. Martin, N., Nidever, D.L., Besla, G., Olsen, K., Walker, A.R., Vivas, K.A., Gruendl, R.A., Kaleida, C., Muñoz, R., Blum, B., Saha, A., Conn, B.C., Bell, E.F., Chu, Y.-H., Cioni, M.-R., de Boer, T.J.L., Gallart, C., Jin, S., **Kunder, Andrea**, Majewski, S.R., Martinez-Delgado, D., Monachesi, A., Monelli, M., Monteagudo, L., Noël, N., Olszewski, E.D., Stringfellow, G.S., van der Marel, R.P. & Zaritsky, D. (2015): "Hydra II: A Faint and Compact Milky Way Dwarf Galaxy Found in the Survey of the Magellanic Stellar History" *The Astrophysical Journal Letters* **804,** 1

32. Anguiano, B., Zucker, D. B., Scholz, R.-D., Grebel, E. K., Seabroke, G., **Kunder, Andrea**, Binney, J., McMillan, P. J., Zwitter, T., Wyse, R. F. G., Kordopatis, G., Bienaymé, O., Bland-Hawthorn, J., Boeche, C., Freeman, K. C., Gibson, B. K., Gilmore, G., Munari, U., Navarro, J., Parker, Q., Reid, W., Siebert, A., Siviero, A., Steinmetz, M., Watson, F. (2015): "Identification of Globular Cluster Stars in RAVE data I: Application to Stellar Parameter Calibration" *Monthly Notices of the Royal Astronomical Society* **451,** 1229

31. Vanderbeke, J., De Propris, R., De Rijcke, S., Baes, M., West, M., Alonso-Garcia, J. & **Kunder, Andrea** (2015): "G2C2 - IV: A novel approach to study the radial distributions of multiple populations in Galactic globular clusters" *Monthly Notices of the Royal Astronomical Society* **451,** 275

30. Qin, Y., Shen, J., Zhao-Yu, L., Mao, S., Smith, M.C., Rich, R.M., **Kunder, Andrea** & Liu, C. (2015): "Kinematics of the X-shaped Milky Way Bulge: Expectations from a Self-consistent N-body Model" *The Astrophysical Journal* **808,** 75

29. Hawkins, K., Kordopatis, G., Gilmore, G., Masseron, T., Wyse, R. F. G., Ruchti, G., Bienaymé, O., Bland-Hawthorn, J., Boeche, C., Freeman, K., Gibson, B. K., Grebel, E. K., Helmi, A., **Kunder, Andrea**, Munari, U., Navarro, J. F., Parker, Q. A., Reid, W. A., Scholz, R. D., Seabroke, G., Siebert, A., Steinmetz, M., Watson, F., Zwitter, T. (2015): "Characterizing the high-velocity stars of RAVE: the discovery of a metal-rich halo star born in the Galactic disc" *Monthly Notices of the Royal Astronomical Society* **447,** 2046

28. **Kunder, Andrea**, Bono, G., Piffl, T., Steinmetz, M., Grebel, E. K., Anguiano, B., Freeman, K., Kordopatis, G., Zwitter, T., Scholz, R., Gibson, B. K., Bland-Hawthorn, J., Seabroke, G., Boeche, C., Siebert, A., Wyse, R. F. G., Bienaymé, O., Navarro, J., Siviero, A., Minchev, I., Parker, Q., Reid, W., Gilmore, G., Munari, U., Helmi, A. (2014): "Spectroscopic signatures of extra-tidal stars around the globular clusters NGC 6656 (M22), NGC 3201 and NGC 1851 from RAVE" *Astronomy & Astrophysics*, **572**, 30

27. Johnson, C.I., Rich, R.M., Chiaki, K., **Kunder, Andrea** & Koch, A. (2014): "Light, Alpha, and Fe-Peak Element Abundances in the Galactic Bulge" *The Astronomical Journal*, **148**, 67

26. Jeon, Y.-B., Nemec, J.M., Walker, A.R., & **Kunder, Andrea** (2014): "B, V Photometry for 19,000 Stars in and around the Magellanic Cloud Globular Clusters NGC 1466, NGC 1841, NGC 2210, NGC 2257, and Reticulum" *The Astronomical Journal*, **147**, 155

25. Prieto, J. L., Rest, A., Bianco, F. B., Matheson, T., Smith, N., Walborn, N. R., Hsiao, E. Y., Chornock, R., Paredes Álvarez, L., Campillay, A., Contreras, C., González, C., James, D., Knapp, G. R., **Kunder, Andrea**, Margheim, S., Morrell, N., Phillips, M. M., Smith, R. C., Welch, D. L., Zenteno, A. (2014): "Light Echoes from eta Carinae's Great Eruption: Spectrophotometric Evolution and the Rapid Formation of Nitrogen-rich Molecules" *The Astrophysical Journal*, **787**, 8

24. Li, Z.-Y., Shen, J., Rich, R.M., **Kunder, Andrea** & Mao, S. (2014): "Are High Velocity Peaks in the Milky Way Bulge due to the Bar?" *The Astrophysical Journal*, **563**, 60

23. Antoja, T., Helmi, A., Dehnen, W., Bienaymé, O., Bland-Hawthorn, J., Famaey, B., Freeman, K., Gibson, B. K., Gilmore, G., Grebel, E. K., Kordopatis, G., **Kunder, Andrea**, Minchev, I., Munari, U., Navarro, J., Parker, Q., Reid, W. A., Seabroke, G., Siebert, A., Steinmetz, M., Watson, F., Wyse, R. F. G., Zwitter, T. (2014): "Constraints on the Galactic bar from the Hercules stream as traces with RAVE across the Galaxy" *Astronomy & Astrophysics*, **562**, 41

22. Soto, M., Zeballos, H., Kuijken, K., Rich, R.M., **Kunder, Andrea**, Astraatmadja, T. (2014): "Proper motions for HST observations in three off-axis bulge fields" *Astronomy & Astrophysics*, **562**, 41

21. **Kunder, Andrea**, Stetson, P.B., Cassisi, S., Layden, A., Bono, G., Catelan, M., Walker, A.R., Paredes-Alvarez, L., Clem, J.L., Matsunaga, N., Salaris, M., Lee, J.-W., & Chaboyer, B. (2013): "The

RR Lyrae Variables and Horizontal Branch of NGC 6656 (M22)" *The Astronomical Journal*, **146**, 119

20. Giridhar, S., Goswami, A., **Kunder, Andrea**, Muneer, S., Selvakumar, G. (2013) "Identification of metal-poor stars using the artificial neural network" *Astronomy & Astrophysics*, **556**, 121

19. Fraga, L., **Kunder, Andrea** & Tokovinin, A. (2013) "SOAR Adaptive Optics Observations of the Globular Cluster NGC 6496" *The Astronomical Journal*, **145**, 165

18. Kuehn, C., Dame, K., Smith, H.A., Catelan, M., Jeon, Y.-B., Nemec, J., Walker, A.R., **Kunder, Andrea**, Pritzl, B., De Lee, N. & Borissova, J. (2013), "Variable Stars in Large Magellanic Cloud Globular Clusters. III. Reticulum" *The Astronomical Journal*, **145**, 160

17. Johnson, C.I., Rich, R.M., Kobayashi, C., **Kunder, Andrea**, Pilachowski, C.A., Koch, A., & De Propris, R. (2013): "Metallicity Distribution Functions, Radial Velocities, and Alpha Element Abundances in Three off-axis Bulge Fields" *The Astrophysical Journal*, ApJ, **765**, 157

16. Di Cecco, A., Zocchi, A., Varri, A. L., Monelli, M., Bertin, G., Bono, G., Stetson, P. B., Nonino, M., Buonanno, R., Ferraro, I., Iannicola, G., **Kunder, Andrea**, Walker, A. R. (2013): "On the Density Profile of the Globular Cluster M92" *The Astronomical Journal*, **145**, 103

15. **Kunder, Andrea**, Stetson, P.B., Catelan, M., Walker, A.R., & Amigo, P. (2013): "Variable stars in the Globular Cluster NGC 2808" *The Astronomical Journal*, **145**, 33-48

14. **Kunder, Andrea**, Salaris, M., Cassisi, S., De Propris, R., Walker, A.R., Stetson, P.B., Catelan, M. & Amigo, P. (2013): "The Horizontal Branch of NGC 1851: Constraints from its RR Lyrae Variables" *The Astronomical Journal*, **145**, 25-32

13. **Kunder, Andrea**, Koch, A. Rich, R.M., De Propris, R., Howard, C.D., Stubbs, S., Johnson, C.I., Shen, J., Wang, Y., Robin, A.C., Kormendy, J., Soto, M., Frinchaboy, P., Reitzel, D.B., Zhao, H. & Origlia, L. (2012): "The Bulge Radial Velocity Assay (BRAVA): II. Complete Sample and Data Release" *The Astronomical Journal*, **143**, 57-71

12. Nemec, J. M., Smolec, R., Benkö, J. M., Moskalik, P., Kolenberg, K., Szabó, R., Kurtz, D. W., Bryson, S., Guggenberger, E., Chadid, M., Jeon, Y.-B., **Kunder, Andrea**, Layden, A. C., Kinemuchi, K., Kiss, L. L., Poretti, E., Christensen-Dalsgaard, J., Kjeldsen, H., Caldwell, D., Ripepi, V., Derekas, A., Nuspl, J., Mullally, F., Thompson, S. E., Borucki, W. J.i (2011): "Fourier analysis of non-Blazhko ab-type RR Lyrae stars observed with the *Kepler* space telescope" *Monthly Notices of the Royal Astronomical Society* **417,** 1022-1053

11. Troisi, F., Bono, G., Stetson, P.B., Pietrinferni, A., Weiss, A., Fabrizio, M., Ferraro, I., Di Cecco, A., Iannicola, G., Buonanno, R., Calamida, A., Caputo, F., Corsi, C.E., Dall'Ora, M., **Kunder, Andrea**, Monelli, M. Nonino, M., Piersimoni, A.M., Pulone, L., Romaniello, M., Walker, A.R., Zoccali, M. (2011): "On a new parameter to estimate the helium content in old stellar systems" *Publications of the Astronomical Society of the Pacific* **123,** 879-891

10. Walker, A.R., **Kunder, Andrea**, Andreuzzi, G., di Cecco, A., Stetson, P.B., Monelli, M., Cassisi, S., Bono, G., De Propris, R., Dall'Ora, M., Nemec, J.M., Zoccali, M. (2011): "Constraints on the Formation of the Globular Cluster IC 4499 from Multi-Wavelength Photometry" *Monthly Notices of the Royal Astronomical Society* **415,** 643-654

9. De Propris, R., Rich, R.M., **Kunder, Andrea**, Johnson, C.I., Koch, A., Brough, S., Conselice, C.J., Gunawardhana, M., Palamara, D., Pimbblet, K., Wijesinghe, D. (2011): "Separating the Conjoined Red Clump in the Galactic Bulge: Kinematics and Abundances" *The Astrophysical Journal,* **732,** 36-41

8. **Kunder, Andrea**, Walker, A.R., Stetson, P.B. Bono, G., Nemec, J.M., De Propris, R., Monelli, M., Cassisi, S., Andreuzzi, G., Dall'Ora, M., Di Cecco, A., Zoccali, M. (2011): "Period Changes and Evolutionary Similarities between Oosterhoff I and Oosterhoff II Globular Clusters" *The Astronomical Journal,* **141,** 15-29

7. Shen, J., Rich, R.M., Kormendy, J., Howard, C.D., De Propris, R. **Kunder, Andrea**, (2010): "Our Milky Way as a Pure-Disk Galaxy – A Challenge for Galaxy Formation" *The Astronomical Journal Letter,* **720,** 72-76

6. Kolenberg, K., Szabó, R., Kurtz, D.W., Gilliland, R.L., Christensen-Dalsgaard, J., Kjeldsen, H., Brown, T.M., Benkö, J.M., Chadid, M., Derekas, A., Di Criscienzo, M., Guggenberger, E., Kinemuchi, K., **Kunder, Andrea**, Kolláth Z., Kopacki, G., Moskalik, P., Nemec, J.M., Nuspl, J., Silvotti, R., Suran, M.D., Borucki, W.J., Koch, D., Jenkins, J.M. (2010): "First Kepler Results on RR Lyrae Stars" *The Astronomical Journal,* **713,** 198-203

5. **Kunder, Andrea**, Chaboyer, B. & Layden, A. (2010): "The Determination of Reddening from Intrinsic VR Colors of RR Lyrae Stars" *The Astronomical Journal,* **139,** 415-424

4. **Kunder, Andrea** & Chaboyer, B. (2009): "An Oosterhoff Analysis of the Galactic Bulge Field RR Lyrae stars: Implications On Their Absolute Magnitudes" *The Astronomical Journal,* **138,** 1284-1291

3. **Kunder, Andrea** & Chaboyer, B. (2009): "Distance to the Sagittarius Dwarf Galaxy Using MACHO Project RR Lyrae Stars" *The Astronomical Journal,* **137,** 4478-4486

2. **Kunder, Andrea** & Chaboyer, B. (2008): "Metallicity Analysis of MACHO Galactic Bulge RR0 Lyrae Stars from their Lightcurves" *The Astronomical Journal,* **136,** 2441-2452

1. **Kunder, Andrea**, Chaboyer, B., Popowski, P. & Cook, K.H. (2008): "The Extinction Toward the Galactic Bulge from RR Lyrae Stars" *The Astronomical Journal,* **135,** 631-636