

Roberto Figuera Jaimes

January 2023

Research Interests

Differential Image Analysis - Real time reductions and photometry extraction

Stellar Evolution - variable stars - open clusters - globular clusters - crowded star fields

Microlesing events - Milky Way centre - exoplanets

Education

04/05/2018 **PhD**, *Astronomy and Space Physics*, University of Saint Andrews, Scotland.

Title *High-Precision Time-Domain Astrophysics in Crowded Star-Fields with Ground Based Telescopes: Globular clusters and the mitigation of the atmospheric turbulence*

Supervisors Dr. Keith Horne, Dr. Daniel Bramich

03/06/2011 **MS**, *Astronomy*, National Autonomous University of Mexico (UNAM), Mexico.
Graduated with honors

Title *The globular cluster NGC 6981: Variable star census, Astrometry and Physical parameters*

Supervisors Dr. Armando Arellano Ferro

28/03/2008 **BS**, *Physics Science*, University of Los Andes (ULA), Venezuela.
Graduated with honors

Title *Variable stars searching and physical parameters in the globular cluster NGC 6366*

Supervisors Dr. Armando Arellano Ferro

Academic Experience

Postdoctoral

2022-Present **Postdoctoral Researcher**, MILLENNIUM INSTITUTE OF ASTROPHYSICS (MAS), Pontifical Catholic University of Chile - Santiago, Chile.

Working on:

- Surveys exploration and image subtraction analysis with the aim to discover and characterize variable stars, and planetary transits in selected regions of the Galaxy

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- 2019-2022 **Adjunct professor**, UNIVERSITY OF SAN SEBASTIAN, Valdivia, Chile.
 Assistant professor in the undergraduate programme at the Faculty of Technology and Engineering where I carried out my own research programme on selected Galactic globular clusters and work as adjunct professor in the courses:
- Physics
 - Differential Equations
 - Basic Statistics
 - Multivariable calculus
 - Calculus
 - Introduction to calculus
- 2018-2019 **Postdoctoral Research Fellow**, UNIVERSITY OF TSINGHUA, Beijing, China.
 Working on:
- Image reduction of stellar crowded fields and photometry extraction of microlensing events in the Milky Way Bulge with the aim to detect extrasolar planets.
- 2018 **Academic visit**, UNIVERSITY OF SAINT ANDREWS, Scotland, PI: Dr. Keith Horne.
 Two month stay working on:
- Set-up an online pipeline to produce photometry for Active Galactic Nuclei from a robotic telescope network.
- 2017 **Academic visit**, LAS CUMBRES OBSERVATORY, United States of America, PI: Dr. Rachel Street.
 six week stay working on:
- Reduction and photometry extraction of microlensing events observed with Las Cumbres observatory network of telescopes during 2017.
- Predoctoral**
- 2016 **Academic visit**, LAS CUMBRES OBSERVATORY, United States of America, PI: Dr. Rachel Street.
 Two month stay working on:
- Optimisation and characterisation of CCD Sinistro camera f108 installed in one of Las Cumbres Observatory robotic telescope network to be used with the image reduction DanDIA pipeline
 - Reduction and analysis of about 15000 images taken with Las Cumbres Observatory network to the field covered in the Campaign 9 of the NASA's Kepler-2 telescope with the aim to detect microlensing light curves associated to extrasolar planets.
- 2012-2014 **PhD Research Associate**, EUROPEAN SOUTHERN OBSERVATORY, Germany.
 Two years stay at this institution as part of my PhD work.

- 2012 **Academic visit**, EUROPEAN SOUTHERN OBSERVATORY, Germany, PI: Dr. Daniel Bramich.
A three month stay working on:
- The analysis, discovery, characterization, and publication of results obtained for the RR Lyrae and other variables in the globular clusters NGC 7492 and NGC 1904
 - The investigation into automatic selection of the number of harmonics to fit to an RR Lyrae light curve using the Bayesian Information Criterion
 - Training on the Robonet microlensing search for extra-solar planets, including training on the operational aspects of the Galactic bulge observing season (Apr - Sep each year)
- 2012 **Academic visit**, UNAM, Mexico, PI: Dr. Armando Arellano Ferro.
A three month stay working on:
- Image reduction and photometry extraction for variable star searches in the globular cluster NGC 7492 and NGC 1904
 - Two observation seasons (six nights in March and nine nights in April) aimed at the globular clusters NGC 4147 and M5 at San Pedro Martir Observatory
- 2010 **Academic visit**, EUROPEAN SOUTHERN OBSERVATORY, Germany, PI: Dr. Daniel Bramich.
A three month stay working on:
- Research on the variable stars and physical parameters of globular cluster NGC 6981
 - Automation and pipeline implementation for the studies of globular clusters
- 2008-2011 **Research assistant**, UNAM, Mexico.
Research assistant level III, attached to the Astronomy Institute of the National Autonomous University of Mexico.
- 2005-2008 **Teaching assistant**, ULA, Venezuela.
In the "Operating system Support" area attached to the Science Faculty management and coordination, University of Los Andes. Merida-Venezuela.
- 2003-2005 **Teaching assistant**, ULA, Venezuela.
In the Theoretical Astrophysics Group of the Faculty of Science, University of Los Andes, doing the following tasks:
- Stellar data analysis and processing
 - Compilation and organisation of the bachelors and postgraduate thesis degree registers of the Faculty of Sciences, ULA

Professional Memberships

- 2021-to present **International Astronomical Union.**
Since April 2021 elected Active Member of the International Astronomical Union.
- 2020-to present **Alpha-Cen.**
Since 2020 elected member of the Astrofísica Centroamericana y del Caribe community which is focused in the growth and development of the Astrophysics in the region
- 2016-to present **Royal Astronomical Society-United Kingdom.**
Since 2016 elected Fellow member of the Royal Astronomical Society of the United Kingdom.

Awards and Honours

- 2013-2016 **SUPA prize studentship competition 2011.**
SUPA (Scottish Universities Physics Alliance) Studentship given to do a PhD in Astronomy and Space Physics at St. Andrews University.
- 2013 **Best Astronomy Master Thesis Award**, UNAM, Mexico.
Honorific mention given by the XXV National Astronomy Meeting of Mexico in its competition of the best theses of the year.
- 2008-2010 **FONACIT International.**
Scholarship given by the National Foundation of Science and Technology of Venezuela (FONACIT), to do a Master in Science (Astronomy) at the National Autonomous University of Mexico.
- 2011 **Best Master Thesis in Natural Sciences Prize**, CINVESTAV, Mexico.
The Centre of Research and Advanced Studies (CINVESTAV) of the “Instituto Politécnico Nacional”, gave the “CINVESTAV prize” to the best Master thesis in natural sciences of the year.
- 2006 **Meritorious Academic Achievement**, ULA, Venezuela.
For being among the twenty best students of the Physics Department in the September 2005 semester with a GPA of 16.4/20.
- 2006 **Science Outreach Award**, ULA, Venezuela.
Congratulation letter and acknowledgement on behalf of the University of Los Andes, for winning the Popularisation of Science Award 2005.
- 2005 **Science Education and Outreach Prize**, Venezuela.
Recognition awarded to students from Sciences and Humanities that made a successful outreach proposal for the project: Design, Technology elaboration and implementation of didactic and disclosure experiments for Science teaching in Basic and High School Education. Granted by The Scientific and Technological Promotion Network of Venezuela.

Membership of collaborations

- 2013-present **RoboNet team**, <http://robonet.lco.global>.
- 2013-present **MiNDSTeP consortium**, <http://www.mindstep-science.org>.

Membership of proposals

- 2013-2021 **Monitoring of selected globular clusters in the Milky Way by using EMCCDs.**, *MiNDSTeP consortium*, PI: Dr. Roberto Figuera Jaimes, Dr. Daniel Bramich, Dr. Jesper Skottfelt, Dr. Martin Dominik, Dr. Keith Horne.
- 2013-2014 **Monitoring of globular clusters in the Milky Way with robotic telescopes.**, *LCOGT network*, PI: Dr. Roberto Figuera Jaimes, Dr. Daniel Bramich, Dr. Rachel Street, Dr. Keith Horne.

Observing experience

- 2013-2016 **1.0 m robotic telescopes with the LCOGT network**, *~60 nights of remote monitoring and quality control.*
- 2021 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile**, *34 nights.*
- 2017 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile**, *14 nights.*
- 2016 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile**, *18 nights.*

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- 2015 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile, 10 nights.**
- 2014 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile, 29 nights.**
- 2013 **Danish 1.54-m Telescope at the ESO Observatory in La Silla, Chile, 6 nights.**
- 2012 **0.84-m Telescope at the National Astronomy Observatory in San Pedro Martir, Mexico, 17 nights.**
- 2001-2008 **1.0 m Reflector Telescope at the National Astronomy Observatory in Llano del Hato, Venezuela, ~20 nights.**

Computer skills

Image reduction and analysis tools: IRAF, DanDIA, DS9, GAIA

Coding in general, IDL. Currently learning Python

Linux, Windows: installation and configuration, computer hardware and support

Text editors, L^AT_EX, OpenOffice, Microsoft Office, etc

Languages

Spanish **Native Speaker**

English **Upper Intermediate - Lower Advanced, IELTS, 09/08/2014.**

Detailed band score:

- Writing: 6.5
- Listening: 5.5
- Reading: 5.5
- Speaking: 4.5
- Overall band score: 5.5

Astronomy & Astrophysics meetings

Congresses

- 2021 **Participant**, 11th *OPTICON Gaia Science Alerts workshop*, VIRTUAL CONFERENCE.
- 2020 **Participant**, *Alpha-Cen Annual Meeting and General Assembly*, VIRTUAL CONFERENCE, Astrophysics in Central America and the Caribbean meeting.
- 2015 **Participant**, *EINSTEIN'S LEGACY*, University of London, England.
Celebrating 100 years of General Relativity
- 2015 **Poster**, *CORMACK ASTRONOMY MEETING*, Scotland.
The Scottish Universities Physics Alliance (SUPA) and Royal Society of Edinburgh Cormack Astronomy Meeting: "A time-series study of the crowded core of 17 globular clusters with high resolution EMCCD imaging. Variable star searches and new discoveries."
- 2015 **Poster**, *NATIONAL ASTRONOMY MEETING*, North Wales.
The National Astronomy Meeting of the Royal Astronomical Society: "Time-Domain Astrophysics in crowded star fields. Globular clusters and variable star searches"
- 2014 **Poster**, *CORMACK ASTRONOMY MEETING*, Scotland.
The Scottish Universities Physics Alliance (SUPA) and Royal Society of Edinburgh Cormack Astronomy Meeting: "Time-Domain Astrophysics with Lucky Imaging in Crowded Star fields: Globular Clusters"

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- 2013 **Participant**, NATIONAL ASTRONOMY MEETING, Scotland.
The National Astronomy Meeting of the Royal Astronomical Society
- 2013 **Participant**, FIRST DOHA INTERNATIONAL ASTRONOMY CONFERENCE, Qatar.
Gravitational Microlensing: 101 years from theory to practice
- 2011 **Poster**, II WORKSHOP ON NUMERICAL AND OBSERVATIONAL ASTROPHYSICS,
University of Buenos Aires, Argentina.
From the First Structures to the Universe Today
- 2011 **Oral Presentation**, FIRST MEETING OF POSTGRADE STUDENTS, National Autonomous University of Mexico, Mexico.
First meeting of postgrade student of the National Autonomous University of Mexico. "The globular cluster NGC 6981: Variable star census, Astrometry and Physical parameters"
- 2010 **Oral Presentation**, XIII LATIN-AMERICAN MEETINGS OF THE ASTRONOMICAL INTERNATIONAL UNION, National Autonomous University of Mexico, Mexico.
"Globular cluster NGC 6981: Physical parameters, variable stars population and astrometry"
- 2009 **Oral Presentation**, VII MEETINGS OF THE VENEZUELAN SOCIETY OF PHYSICS, Central University of Venezuela, Venezuela.
"CCD Photometry of the globular cluster NGC 6981"
- 2008 **Poster**, VI MEETINGS OF THE VENEZUELAN SOCIETY OF PHYSICS, University of Los Andes, Venezuela.
"Variable star searches and physical parameter estimates in the globular cluster NGC 6366"
- 2005 **Participant**, TELESCOPE INSTRUMENTATION CONFERENCES, Astronomical Research Center of Venezuela, Venezuela.
Acknowledgment for attending the "Telescope Instrumentation Conferences". In the Astronomical Research Center of Venezuela (CIDA) and National Astronomical Observatory of Llano del Hato, Mérida, Venezuela.
- 2004 **Participant**, THIRD INTERNATIONAL CONGRESS AND FIRST ASSOCIATED COURSE OF DYNAMIC ASTRONOMY IN LATIN- AMERICA, Astronomical Research Center of Venezuela, Venezuela.
Acknowledgment for attending the "Third International Congress and First Associated Course of Dynamic Astronomy in Latin- America", in the Astronomy Research Center of Venezuela (CIDA). Mérida, Venezuela

Astronomy & Astrophysics Schools

- 2015 **STFC Introductory Summer School**, QUEEN'S UNIVERSITY OF BELFAST, Northern Ireland.
Atomic processes and spectral modelling in astrophysics
- 2013 **Spring School of Spectroscopic Data Analyses**, UNIVERSITY OF WROCLAW, Poland.
Determination of Atmospheric Parameters of B, A, F and G type stars
- 2012 **XXIV Canary Islands Winter School of Astrophysics**, INSTITUTE OF ASTROPHYSICS OF THE CANARY ISLANDS (IAC), Spain.
Astrophysical Applications of Gravitational Lensing

Other Certificates

- 2006 **Participant**, GNU/LINUX BASIC, University of Los Andes, Venezuela.
Acknowledgment for the participation in the course "GNU/Linux Basic" carry out in the Training Unit of the Teleinformation Center of the Technological Park of Mérida and the Academic Computation Council of Los Andes University
- 2004 **Participant**, APTITUDE DEVELOPMENT FOR THE ACADEMIC ACHIEVE, University of Los Andes, Venezuela.
Acknowledgement for attending the seminary "Aptitude development for the Academic Achieve" carried out in the Faculty of Sciences of the University of Los Andes

Science Outreach and Public Engagement

- 05-11-2020 **EclipseLosRios2020**, *Member of the organizer committee of the EclipseLosRios2020 public event*, Chile, <https://www.facebook.com/EclipseLosRios2020>.
<https://www.youtube.com/channel/UCGJDPlxUf6azS0vdZuTVp4g>
- 26-02-2011 **Night of the stars**, Mexico.
- 17-04-2010 **Second night of the stars**, Mexico.
- 31-01-2009 **Night of the stars: The sky of our ancestors**, Mexico.
- Certificates granted by the Faculty of Sciences of the University of Los Andes (ULA) - Venezuela, for taking part in the design and active participation of the following experiments*
- 30/10-03/11/2006 **Solar System: Eight or nine planets?**, *Venezuela*, VII Encounter with Physics, Chemistry, Mathematics and Biology.
- 24/10/-28/10/2005 **Sand Pendulum and Lissajous Curve**, *Venezuela*, VI Encounter with Physics, Chemistry, Mathematics and Biology.
- 24/10/-28/10/2005 **Radiation and Energy Transport Mechanisms**, *Venezuela*, VI Encounter with Physics, Chemistry, Mathematics and Biology.
- 24/10/-28/10/2005 **Geometric Optics and Telescope fabrication**, *Venezuela*, VI Encounter with Physics, Chemistry, Mathematics and Biology.
- 25/10/-29/10/2004 **Surface Tension**, *Venezuela*, V Encounter with Physics, Chemistry, Mathematics and Biology.
- 25/10/-29/10/2004 **Inertia, Mass and Reaction Propulsion**, *Venezuela*, V Encounter with Physics, Chemistry, Mathematics and Biology.
- 25/10/-29/10/2004 **Forms of Energy Transportation**, *Venezuela*, V Encounter with Physics, Chemistry, Mathematics and Biology.
- 25/10/-29/10/2004 **Black Holes**, *Venezuela*, V Encounter with Physics, Chemistry, Mathematics and Biology.
- 25/10/-29/10/2004 **Stellar Evolution**, *Venezuela*, V Encounter with Physics, Chemistry, Mathematics and Biology.
- 27/10/-31/10/2003 **Mars Approaching to Earth**, *Venezuela*, IV Encounter with Physics Mars Approaching to Earth.
- 27/10/-31/10/2003 **Black Body Radiation**, *Venezuela*, IV Encounter with Physics.

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28/10/- **The Universe in your Hands**, *Venezuela*, III Encounter with Physics.
01/11/2002

28/10/- **Balance Point between the Earth and the Moon**, *Venezuela*, III Encounter with
01/11/2002 Physics.

28/10/- **Solar Structure and HR Diagram**, *Venezuela*, III Encounter with Physics.
01/11/2002

29/10/- **Free fall with Parabolic Movement**, *Venezuela*, II Encounter with Physics.
02/11/2001

Participation as a jury in the physic experiments of the “Cecilio Acosta High
School” in the following events

09/06/2006 **Participation as a jury**, *Venezuela*, V Encounter with Physics and Chemistry.

06/06/- **Participation as a jury**, *Venezuela*, IV Encounter with Physics.
10/06/2005

31/05/- **Participation as a jury**, *Venezuela*, III Encounter with Physics.
04/06/2004

02/06/- **Participation as a jury**, *Venezuela*, II Encounter with Physics.
06/06/2003

03/06/- **Participation as a jury**, *Venezuela*, I Encounter with Physics.
07/06/2002

Scientific Publications

Microlensing and Exoplanets

- 2022 **VLT, GROND and Danish Telescope observations of transits in the TRAPPIST-1 system**, Southworth, John; Mancini, L.; Dominik, M. and 14 more, 2022Obs...142..220S.
- 2022 **A search for transit timing variations in the HATS-18 planetary system**, Southworth, John; Barker, A. J.; Hinse, T. C. and 23 more, 2022MNRAS.tmp.1844S.
- 2022 **Lens parameters for Gaia18cbf – a long gravitational microlensing event in the Galactic Plane**, Kruszyńska, Katarzyna; Wyrzykowski, Ł.; Rybicki, K. A. and 28 more, 2021arXiv211108337K2021/11.
- 2020 **OGLE-2018-BLG-0799Lb: a Sub-Saturn-Mass Planet Orbiting a Very Low Mass Dwarf**, Zang, Weicheng; Shvartzvald, Yossi; Udalski, Andrzej and 73 more, 2020arXiv201008732Z.
- 2020 **Large-scale changes of the cloud coverage in the α Cen A and B system**, Hitchcock, J. A.; Helling, Ch; Scholz, A. and 23 more, 2020MNRAS.495.3881H.
- 2020 **Spitzer Microlensing Parallax Reveals Two Isolated Stars in the Galactic Bulge**, Zang, Weicheng; Shvartzvald, Yossi; Wang, Tianshu and 97 more, 2020ApJ...891....3Z.
- 2020 **Full orbital solution for the binary system in the northern Galactic disc microlensing event Gaia16aye**, Wyrzykowski, Ł.; Mróz, P.; Rybicki, K. A. and 182 more, 2020A&A...633A..98W2020/01.
- 2019 **Transit timing variations in the WASP-4 planetary system**, Southworth, John; Dominik, M.; Jørgensen, U. G. and 25 more, 2019MNRAS.490.4230S2019/12.
- 2019 **OGLE-2015-BLG-1649Lb: A Gas Giant Planet around a Low-mass Dwarf**, Nagakane, M.; Lee, Chien-Hsiu; Koshimoto, N. and 70 more, 2019AJ....158..212N2019/11.
- 2019 **OGLE-2017-BLG-1186: first application of asteroseismology and Gaussian processes to microlensing**, Li, S. -S.; Zang, W.; Udalski, A. and 102 more, 2019MNRAS.488.3308L2019/09.
- 2019 **An analysis of binary microlensing event OGLE-2015-BLG-0060**, Tsapras, Y.; Cassan, A.; Ranc, C. and 152 more, 2019MNRAS.487.4603T2019/08.
- 2019 **Physical properties and transmission spectrum of the WASP-74 planetary system from multiband photometry**, Mancini, L.; Southworth, J.; Mollière, P. and 32 more, 2019MNRAS.485.5168M2019/06.
- 2019 **OGLE-2014-BLG-1186: gravitational microlensing providing evidence for a planet orbiting the foreground star or for a close binary source?**, Dominik, M.; Bachelet, E.; Bozza, V. and 42 more, 2019MNRAS.484.5608D2019/04.
- 2019 **First Assessment of the Binary Lens OGLE-2015-BLG-0232**, Bachelet, E.; Bozza, V.; Han, C. and 54 more, 2019ApJ...870...11B2019/01.

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- 2018 **OGLE-2017-BLG-1434Lb: Eighth $q < 10^{-4}$ Mass-Ratio Microlens Planet Confirms Turnover in Planet Mass-Ratio Function**, Udalski, A.; Ryu, Y. -H.; Sajadian, S. and 55 more, 2018AcA....68....1U2018/03.
- 2018 **High-resolution Imaging of Transiting Extrasolar Planetary systems (HITEP). II. Lucky Imaging results from 2015 and 2016**, Evans, D. F.; Southworth, J.; Smalley, B. and 33 more, 2018A&A...610A..20E2018/02.
- 2018 **OGLE-2014-BLG-0289: Precise Characterization of a Quintuple-peak Gravitational Microlensing Event**, Udalski, A.; Han, C.; Bozza, V. and 71 more, 2018ApJ...853...70U2018/01.
- 2018 **OGLE-2016-BLG-1190Lb: The First Spitzer Bulge Planet Lies Near the Planet/Brown-dwarf Boundary**, Ryu, Y. -H.; Yee, J. C.; Udalski, A. and 115 more, 2018AJ....155...40R2018/01.
- 2018 **RoboTAP: Target priorities for robotic microlensing observations**, Hundertmark, M.; Street, R. A.; Tsapras, Y. and 21 more, 2018A&A...609A..55H2018/01.
- 2017 **Ground-based Parallax Confirmed by Spitzer: Binary Microlensing Event MOA-2015-BLG-020**, Wang, Tianshu; Zhu, Wei; Mao, Shude and 88 more, 2017ApJ...845..129W2017/08.
- 2017 **Faint-source-star planetary microlensing: the discovery of the cold gas-giant planet OGLE-2014-BLG-0676Lb**, Rattenbury, N. J.; Bennett, D. P.; Sumi, T. and 85 more, 2017MNRAS.466.2710R2017/04.
- 2017 **Orbital alignment and star-spot properties in the WASP-52 planetary system**, Mancini, L.; Southworth, J.; Raia, G. and 27 more, 2017MNRAS.465..843M2017/02.
- 2017 **MiNDSTeP differential photometry of the gravitationally lensed quasars WFI 2033-4723 and HE 0047-1756: microlensing and a new time delay**, Giannini, E.; Schmidt, R. W.; Wambsganss, J. and 52 more, 2017A&A...597A..49G2017/01.
- 2016 **Campaign 9 of the K2 Mission: Observational Parameters, Scientific Drivers, and Community Involvement for a Simultaneous Space- and Ground-based Microlensing Survey**, Henderson, Calen B.; Poleski, Radosław; Penny, Matthew; Street, Rachel A.; Bennett, David P.; Hogg, David W.; Gaudi, B. Scott; K2 Campaign 9 Microlensing Science Team; Zhu, W.; Barclay, T.; and 117 coauthors, 2016PASP..128l4401H.
- 2016 **The First Simultaneous Microlensing Observations by Two Space Telescopes: Spitzer and Swift Reveal a Brown Dwarf in Event OGLE-2015-BLG-1319**, Shvartzvald, Y.; Li, Z.; Udalski, A.; Gould, A.; Sumi, T.; Street, R. A.; Calchi Novati, S.; Hundertmark, M.; Bozza, V.; Beichman, C.; and 89 coauthors, 2016ApJ...831..183S.
- 2016 **Discovery of a Gas Giant Planet in Microlensing Event OGLE-2014-BLG-1760**, Bhattacharya, A.; Bennett, D. P.; Bond, I. A.; Sumi, T.; Udalski, A.; Street, R.; Tsapras, Y.; Abe, F.; Freeman, M.; Fukui, A.; and 41 coauthors, 2016AJ....152..140B.

- 2016 **OGLE-2015-BLG-0479LA,B: Binary Gravitational Microlens Characterized by Simultaneous Ground-based and Space-based Observations**, Han, C.; Udalski, A.; Gould, A.; Zhu, Wei; Street, R. A.; Yee, J. C.; Beichman, C.; Bryden, C.; Calchi Novati, S.; Carey, S.; and 58 coauthors, 2016ApJ...828...53H.
- 2016 **Mass Measurements of Isolated Objects from Space-based Microlensing**, Zhu, Wei; Calchi Novati, S.; Gould, A.; Udalski, A.; Han, C.; Shvartzvald, Y.; Ranc, C.; Jørgensen, U. G.; Poleski, R.; Bozza, V.; and 78 coauthors, 2016ApJ...825...60Z.
- 2016 **The Spitzer Microlensing Program as a Probe for Globular Cluster Planets: Analysis of OGLE-2015-BLG-0448**, Poleski, Radosław; Zhu, Wei; Christie, Grant W.; Udalski, Andrzej; Gould, Andrew; Bachelet, Etienne; Skottfelt, Jesper; Calchi Novati, Sebastiano; Szymański, M. K.; Soszyński, I.; and 82 coauthors, 2016ApJ...823...63P.
- 2016 **High-resolution Imaging of Transiting Extrasolar Planetary systems (HITEP). I. Lucky imaging observations of 101 systems in the southern hemisphere**, Evans, D. F.; Southworth, J.; Maxted, P. F. L.; Skottfelt, J.; Hundertmark, M.; Jørgensen, U. G.; Dominik, M.; Alsubai, K. A.; Andersen, M. I.; Bozza, V.; and 26 coauthors, 2016A&A...589A..58E.
- 2016 **High-precision photometry by telescope defocussing - VIII. WASP-22, WASP-41, WASP-42 and WASP-55**, Southworth, John; Tregloan-Reed, J.; Andersen, M. I.; Calchi Novati, S.; Ciceri, S.; Colque, J. P.; D'Ago, G.; Dominik, M.; Evans, D. F.; Gu, S.-H.; and 40 coauthors, 2016MNRAS.457.4205S.
- 2016 **The OGLE-III planet detection efficiency from six years of microlensing observations (2003-2008)**, Tsapras, Y.; Hundertmark, M.; Wyrzykowski, Andrzej; Horne, K.; Udalski, A.; Snodgrass, C.; Street, R.; Bramich, D. M.; Dominik, M.; Bozza, V.; and 10 coauthors, 2016MNRAS.457.1320T.
- 2016 **Spitzer Observations of OGLE-2015-BLG-1212 Reveal a New Path toward Breaking Strong Microlens Degeneracies**, Bozza, V.; Shvartzvald, Y.; Udalski, A.; Calchi Novati, S.; Bond, I. A.; Han, C.; Hundertmark, M.; Poleski, R.; Pawlak, M.; Szymański, M. K.; and 98 coauthors, 2016ApJ...820...79B.
- 2016 **Spitzer Parallax of OGLE-2015-BLG-0966: A Cold Neptune in the Galactic Disk**, Street, R. A.; Udalski, A.; Calchi Novati, S.; Hundertmark, M. P. G.; Zhu, W.; Gould, A.; Yee, J.; Tsapras, Y.; Bennett, D. P.; RoboNet Project, The; and 100 coauthors, 2016ApJ...819...93S.
- 2016 **Physical properties of the planetary systems WASP-45 and WASP-46 from simultaneous multiband photometry**, Ciceri, S.; Mancini, L.; Southworth, J.; Lendl, M.; Tregloan-Reed, J.; Brahm, R.; Chen, G.; D'Ago, G.; Dominik, M.; Figueroa Jaimes, R.; and 38 coauthors, 2016MNRAS.456..990C.
- 2015 **Larger and faster: revised properties and a shorter orbital period for the WASP-57 planetary system from a pro-am collaboration**, Southworth, John; Mancini, L.; Tregloan-Reed, J.; Calchi Novati, S. and 35 coauthors, 2015MNRAS.454.3094S.

- 2015 **Spitzer Microlens Measurement of a Massive Remnant in a Well-separated Binary**, Shvartzvald, Y.; Udalski, A.; Gould, A.; Han, C.; Bozza, V.; Friedmann, M.; Hundertmark, M.; and; Beichman, C.; Bryden, G.; and 63 coauthors, 2015ApJ...814..111S.
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- 2015 **Pathway to the Galactic Distribution of Planets: Combined Spitzer and Ground-Based Microlens Parallax Measurements of 21 Single-Lens Events**, Calchi Novati, S.; Gould, A.; Udalski, A.; Menzies, J. W.; Bond, I. A.; Shvartzvald, Y.; Street, R. A.; Hundertmark, M.; Beichman, C. A.; Yee, J. C.; and 82 coauthors, 2015ApJ...804...20C.
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