



**XIV Annual SOCHIAS Meeting
Marbella, January 23-26, 2017**

Sunday, January 22, 2017

17:00 - 20:00 Registration

18:00 Welcome Reception (Conference Center Patio)

Monday, January 23, 2017

Plenary Session I (Salón Marbella). Chair: James Jenkins

8:45 Welcome: Ezequiel Treister, Patricio Rojo

9:00 Lucas Cieza: "Imaging the water snow-line during a protostellar outburst"

9:40 Claudio Caceres: "Towards an evolutionary sequence in young planetary mass companions"

10:20 - 11:00

Coffee Break (Conference Center Patio)

Parallel Session I

Planets & UCDs (Salón Marbella)
Chair: Bárbara Rojas-Ayala

Galaxy Structure (Salón Tamayo)
Chair: Christian Moni Bidin

Neutron Stars (Salón Monterrey)
Chair: Andreas Reisenegger

11:00 Néstor Espinoza: "Connecting atmospheric composition with planet formation: C/O ratios and beyond"

Linda Watson: "The Resolved Vertical Structure of Molecular Gas in Edge-on Disk Galaxies"

Francisco Castillo: "Magnetic field evolution in neutron stars: the effect of ambipolar diffusion"

11:15 Laura Flores: "Geological and thermal analysis of volcanic-magmatic structure in Parga Chasma, Venus"

Juan Molina: "SINFONI-HiZELS: The dynamics, merger rates & metallicity gradients of 'typical' star-forming galaxies at $z = 0.8-2.2$ "

Javier Arenas: "Can rotation fracture the neutron star crust?"

11:30 Mekhi Dhesi: "Twinkle Space Mission for Exoplanet Spectroscopy"

Justus Neumann: "Photometry and kinematics in a mixer: A combined recipe for evaluating the nature of bulges using the CALIFA sample"

Luis Rodríguez: "Thermal Evolution of Old Neutron Star"

11:45 Juan Carlos Beamín: "Search and characterization of ultra cool dwarfs from the VVV survey"

12:00-13:30

Lunch (Hotel Marbella main dining room)

Plenary Session II (Salón Marbella). Chair: Patricio Rojo

13:30 James Jenkins: "The discovery and characterisation of the nearest exoplanet Proxima b"

14:10 Mikko Tuomi: "Planets orbiting M dwarfs in the Solar neighbourhood"

Parallel Session II

Exoplanets (Salón Marbella)
Chair: James Jenkins

Dwarf Satellites (Salón Tamayo)
Chair: Yara Jaffe

Black Holes and Cosmology (Salón Monterrey)
Chair: Graeme Candlish

15:00 Giovannina Mansir: "Transit Modeling using MCMC and Gaussian Process Regression"

Michael Fellhauer: "How to make dSph galaxies?"

Claudio Ricci: "An X-ray view of galaxy mergers and obscured black hole growth"

15:15 Rafael Brahm: "K2 Planets from Chile"

Alex Alarcón: "The formation of dwarf Spheroidal galaxies including their star formation histories"

Nelson Padilla: "Redshift space distortions around voids"

15:30 Néstor Espinoza: "Unveiling exoplanet atmospheres with the ACCESS survey"

Sebastián Marchi: "Scaling Relations of Milky Way's Outer Halo Satellite Objects"

Enrique Paillas: "Unveiling cosmology with void regions"

15:45 Matias Jones: "Determination of companions mass using combined radial velocity and astrometric data"

16:00-16:30

Coffee Break (Conference Center Patio)

Parallel Session III

	Accretion Disks (Salón Marbella) Chair: Amelia Bayo	Stellar Populations (Salón Tamayo) Chair: Sonia Duffau	Galaxy Evolution I (Salón Monterrey) Chair: Guillermo Blanc
16:30	Daniela Iglesias: "Debris disks with multiple absorption features in metallic lines: circumstellar or interstellar origin?"	Ricardo Salinas: "The overlooked role of stellar variability in the extended main sequence of LMC intermediate-age clusters"	Edo Ibar: "VALES: The Valparaíso ALMA Line Emission Survey"
16:45	Sebastian Stammer: "Can Ice Lines create Rings? – The Influence of Ice Lines on Dust Growth in Protoplanetary Disks"	Luca Sbordone: "A tale of two elements: Sulphur and Zinc in our galaxy as seen by GES"	Antonios Katsianis: "The evolution of the observed and simulated star formation rates of $z \sim 0-8$ galaxies"
17:00	Camilo Fontecilla: "Second decoupling between SMBHB and its inner accretion disc"	Maritza Soto: "SPECIES: Spectroscopic Parameters and atmospheric Chemistries of Stars"	Jiasheng Huang: "Formation of Massive Galaxies through ULIRG phase at $z=2$ "
17:15	Matías Gárate: "The effect of planetary feedback in the circumplanetary region."	Christian Moni Bidin: "Young stars in the periphery of the LMC"	Pierluigi Cerulo: "Observing the Transformation of Galaxies in Distant Clusters"

Computing Workshop I (Salón Marbella).

17:45 - 18:30 Amelia Bayo: Chi-VO: developing VO tools for the chilean community.

SOCHIAS "Astro-therapy" Workshops: Open discussion on community issues

18:30 - 19:30	Salón Marbella Chair: Ezequiel Treister Faculty	Salón Tamayo Chair: Constanza Yovaniniz Graduate Students	Salón Monterrey Chair: Paulina Troncoso Post Doctoral researchers
---------------	--	--	--

Outreach talk (Salón Marbella)

20:00 Andreas Reisenegger: "Ondas gravitacionales: un nuevo canal de información del Universo"

Tuesday, January 24, 2017

Plenary Session III (Salón Marbella). Chair: Morten Andersen

9:00 Amelia Stutz: "Beyond turbulence: a fundamentally different mode of cluster formation in Orion"

9:40 Keiichi Ohnaka: "Resolving the mass loss from stars in late evolutionary stages by high spatial resolution observations"

10:20 - 11:00

Coffee Break (Conference Center Patio)

Parallel Session IV

Variable Stars (Salón Marbella)
Chair: Maja Vukovic

Supernovae (Salón Tamayo)
Chair: Joseph Anderson

ISM, IGM, Cosmic Rays
(Salón Monterrey)
Chair: Manuel Aravena

11:00 Sonia Duffau: "Characterizing the chemistry of the old Milky Way Bulge population by means of RR Lyrae stars"

Jose Prieto: "Interacting supernovae and other weirdos in ASAS-SN"

Nicolas Tejos: "Probing diffuse baryons in the intra-cluster medium of galaxy clusters"

11:15 Constanza Yovanin: "Detection and Characterization of RR Lyrae in Extragalactic Fields"

Felipe Olivares: "Correlations within the GRB-SN connection: SN luminosity standarizations for cosmology"

Mario Riquelme: "Simulations of the Plasma Around Sgr A*: Electron Heating and Acceleration"

11:30 Ricardo Ramírez: "Photometric monitoring of Proxima Centauri to study its magnetic activity and flaring properties"

Alessandro Razza: "Extinction laws towards supernovae with integral field spectroscopy"

Francisco Ley: "Ion Acceleration in Accretion Disks: A possible source of Cosmic Rays"

11:45 Gustavo Medina: "Searching for distant RR Lyrae using HiTS"

Lingzhi Wang: "Na absorption lines in Type Ia Supernovae"

Tom Hughes: "Physical conditions of interstellar gas in star-forming galaxies at $z < 0.2$ "

12:00-13:30

Lunch (Hotel Marbella main dinning room)

Plenary Session IV (Salón Marbella). Chair: James Jenkins

- 13:30 Graduate Student Prize Lecture: Gergely Hajdu: "Cepheid variables in the VVV survey"
- 14:10 Bárbara Rojas-Ayala: "The characterization of the tiny stars"

Parallel Session V

Galaxy Evolution II (Salón Marbella)
Chair: Valentino González

Binary stars (Salón Tamayo)
Chair: Claus Tappert

Surveys & Algorithms
(Salón Monterrey)
Chair: Roberto González

15:00 Guillermo Blanc: "A Transition Mass Scale in the Galaxy Mass-Metallicity Relation"

Madelon Bours: "HW Vir: a direct detection of the secondary star"

Jorge Martinez: "Compilation and characterization of light-curves catalogs for HiTS"

15:15 Diego Pallero : "Tracing the Quenching History in Galaxy Clusters in the EAGLE Simulation"

Linda Schmidtobreick: "The hunt for ancient novae"

Piera A. Soto: "Stellar clustering in the dark filament IRDC 321.706+0.066"

15:30 Nahir Muñoz: "Physical properties of a near TDG candidate and its parent galaxy NGC 4656"

Blake Pantoja: "Direct Imaging of Radial Velocity Companions"

Johannes Buchner: "NWAY - the fast and versatile cross-matching algorithm"

15:45 Maria Argudo-Fernández: "SFH of MaNGA galaxies with CIGALE"

Karleyne Silva: "High and low states of polars from CRTS survey"

Paulina Troncoso: "UVAS: the U-band Chilean extension of the ATLAS survey"

16:00-17:00

Coffee Break + Poster Session (Conference Center Patio)

Parallel Session VI

Education and Public Outreach Session
(Salón Marbella)

Computing Workshop II
(Salón Tamayo)

17:00 - 18:00 Chris Smith: Panel Discussion on Astronomy EPO in Chile: Communication, Coordination, & Collaboration

Roberto González: "Parallel programming in the era of Big Data"

20:30

Conference Banquet (Conference Center Patio)

Wednesday, January 25, 2017

Plenary Session V (Salón Marbella). Chair: Bárbara Rojas-Ayala.

9:00 Pedro Pineda: “¿Qué hace un astrónomo en el mundo de las finanzas?”

9:40 Javier Alonso-García: “Globular clusters in the inner Milky Way”

10:20 - 11:00

Coffee Break (Conference Center Patio)

Parallel Session VII

Molecular Clouds

Salón Marbella)
Chair: Michael Fellhauer

Instrumentation

(Salón Tamayo)
Chair: Matías Jones

Clusters

(Salón Monterrey)
Chair: Jura Borissova

11:00 Fernando Selman: “A quantitative look at the ionized gas in the tail of IC3418”

Surangkha Rukdee: “TARdYS: design of an exoplanet hunter for TAO”

Doug Geisler: “GeMS Observations of the Obscured Galactic Bulge Globular Cluster NGC 6624”

11:15 Monica Rubio: “Low metallicity molecular clouds”

Valeria Tapia: “Broadband optics systems for ALMA Band 1 and Band 2+3”

Bruno Dias: “GOTHAM survey: the chemistry of Milky Way globular clusters is not what we thought”

11:30 Sergio Torres Flores: “Fabry-Perot observations with ground layer adaptive optics: The kinematics of 30 Doradus”

Ernest Michael: “Fiber-based heterodyne infrared interferometry: an instrumentation study platform on the way to the proposed Infrared Planet Formation Imager”

Baitian Tang: “Two Groups of Red Giants with Distinct Chemical Abundances in the Bulge Globular Cluster NGC 6553 Through the Eyes of APOGEE”

11:45 Dominik Schleicher: “The chemistry of star formation with KROME: chemical modeling from cores to filaments to galactic scales”

12:00-13:30

Lunch (Hotel Marbella main dining room)

Plenary Session VI (Salón Marbella) Chair: Guillermo Blanc

13:30 Manuel Aravena: "ASPECS: The ALMA Spectroscopic Survey of the Hubble Ultra Deep Field"

14:10 Yara Jaffe: "The hard life of galaxies in galaxy clusters"

Plenary Session VIII (Salón Marbella) Chair: Patricio Rojo

15:00 **AURA** - Chris Smith: "Update from AURA: CTIO, Gemini, SOAR, LSST, and other projects"

15:15 **ALMA Observatory** - Adele Plunket: "New ALMA Capabilities for Cycle 5"

15:30 **ESO** - Joseph Anderson: "ESO: Status and perspectives"

15:45 **LCO** - Konstantina Boutsia: "Instrumentation at the Magellan Telescopes"

16:00-17:00

Coffee Break + Poster Session (Conference Center Patio)

General Assembly (Salón Marbella)

17:00 Members meeting

Star Gazing Night

20:00 Open to all public. At two locations: Helipuerto Marbella and Cancha Club Deportivo Horcón.

Thursday, January 26, 2017

Plenary Session VIII (Salón Marbella). Chair: José Prieto.

9:00 Loreto Barcos-Muñoz: “ALMA’s View of the Arp 220 Disks From New Extended Configuration Observations of Dense Gas Tracers”

9:40 Joseph Anderson: “Type II supernovae: the most abundant stellar explosion in the Universe”

10:20 - 11:00

Coffee Break (Conference Center Patio)

Parallel Session IX

Institutions/Observatories
(Salón Marbella)
Chair: Chris Smith

Star Formation (Salón Tamayo)
Chair: Amelia Stutz

Evolved Stars, PNe
(Salón Monterrey)
Chair: Keiichi Ohnaka

11:00 Rodrigo Reeves: “LCT project: a sub-mm science/technology platform”

Adele Plunkett: “Uncovering the protostars in Serpens South with ALMA: continuum sources and their outflow activity”

Carlos Morales: “High spatial and high spectral resolution observations of the red giant Arcturus in the 2.3 micron CO lines with VLT/AMBER”

11:15 Michael Blanton: “The Sloan Digital Sky Survey and APOGEE-2”

José Utreras: “Unveiling the role of galactic rotation on star formation”

Alba Aller: “A third guest in the central star of the planetary nebula LoTr5”

11:30 Wei Wang: “CASSACA's recent progress”

Marcelo Mora: “Star forming regions in distorted galaxies: The Penguin (NGC2936) and NGC1427A”

Jinhua He: “Monitor millimeter line variation toward IRC +10216”

11:45 Joanna Thomas-Osip: “The Gemini Science User Support Department: A community-centered approach to user support”

Veronica Firpo: “Violent star formation in galaxy interactions”

Daniela Barría: “Photometric study of shock excited regions at multiple shell planetary nebulae”

12:00-13:30

Lunch (Hotel Marbella main dining room)

Plenary Session IX (Salón Marbella). Chair: Roberto Assef

13:30 Graeme Candlish: "Cosmological models beyond LCDM"

Parallel Session X

	Massive stars (Salón Marbella) Chair: Dominik Schleicher	AGN & QSOs (Salón Tamayo) Chair: Roberto Assef
14:15	Ignacio Araya: "Stellar and wind parameters of massive stars from spectral analysis"	Pedro Humire: "About the kinematic and dynamic of the active galactic nucleus of ESO 362-G18"
14:30	Diah Gunawan: "ALMA Observation of Mass-Loss Rates From Massive Stars"	Patricia Bessiere: "Characterising the host galaxies of type II quasars"
14:45	Natalie Ulloa: "A yellow-red high-resolution spectroscopic study of O-type standard stars"	Ezequiel Treister: "The Role of Major Mergers in Black Hole Growth and Galaxy Evolution"
15:00	Massinissa Hadjara: SCIROCCO: Simulation Code of Interferometric-observations for ROTators and CirCumstellar Objects"	Venkatessh Ramakrishnan: "Nuclear streaming in nearby AGN"

15:15-16:00

Coffee Break + Poster Session (Conference Center Patio)

Light Pollution - Telescope Time Allocation - CONICYT (Salón Marbella). Chair: Ezequiel Treister

16:00 Pedro Sanhueza: "Acciones concretas de SOCHIAS/OPCC para la plena implementación de la Norma Lumínica II"

16:15 Ricardo Muñoz: "The Chilean Telescope Allocation Committee"

16:45 Luis Chavarría: "Challenges for the Astronomy Program at CONICYT"

18:00

Buses to Santiago (Hotel Marbella parking lot)