

# METALS IN 3D: NEW INSIGHTS FROM INTEGRAL FIELD SPECTROSCOPY

## WORKSHOP PROGRAM

### TUESDAY APRIL 17TH

18:00 Registration open at Instituto de Astrofísica de Andalucía

### WEDNESDAY APRIL 18TH

08:30 – 09:00 Registration (Palacio de los condes de Gabia)

09:00 - 09:30 Presentation and welcome

### SESSION I: NEW RESULTS FOR THE LOCAL UNIVERSE: STARS, DUST AND GAS

Chair: Jeremy Walsh

09:30 - 10:00 Sebastián F. Sánchez (I)

*CALIFA: A new view on HII regions*

10:00 - 10:15 Fabián Rosales

*The true nature of the metallicity gradient of NGC1058*

10:15 - 10:30 Ana Monreal-Ibero

*2D mapping of the physical and chemical properties of the ionized gas in NGC5253*

10:30 - 11:00 Patricia Sánchez-Blázquez (I)

*Stellar population gradients in nearby disk galaxies from the CALIFA survey. Lessons to learn from IFS studies.*

11:00 – 11:15 Rosa Domínguez-Tenreiro

*Metals in 3D: What chemodynamical simulations can do for you*

11:15 - 11:55 Coffee break

Chair: Beatriz Barbuy

11:55 - 12:25 Roger Davies (I)

*Clues on how early type galaxies assemble from IFS measurements of their composition and dynamics*

12:25 - 12:45 Carina Lagerholm

*Stellar Populations and Kinematics of Early Type Galaxies - a 2-D view with VLT/VIMOS*

12:45 - 13:05 Mónica Relaño

*Integral Field Spectroscopy of two luminous HII regions in M33: study of the physical properties across the face of the regions.*

13:05 - 13:20 Enrique Pérez-Montero

*Unraveling the 2D structure of Giant HII Regions using photoionization models*

13:20 - 13:35 Elena Terlevich

*Integral field spectroscopy of HII regions in M33*

13:35 - 13:55 Carolina Kehrig

*Integral Field Spectroscopy of HII Galaxies with WR signatures*

13:55 - 14:15 Bethan James

*Revealing the True Metal Abundances in Blue Compact Dwarf Galaxies with IFU Spectroscopy*

14:15 - 16:00 LUNCH

Chair: Grażyna Stasińska

16:00 - 16:30 Yiannis Tsamis (I)

*Probing the metallicity of proplyds in HII regions with IFS*

16:30 - 16:45 César Esteban

*HII Regions are not so simple. Insights from Integral Field Spectroscopy of the Orion nebula.*

16:45 - 17:00 Polychronis Papaderos

*Extremely metal-poor star-forming galaxies in the nearby Universe*

17:00 – 17:15 Patricio Lagos

*Studying the interstellar medium of HII/BCD galaxies using IFU spectroscopy*

17:15 – 17:55 Coffee break

Chair: Casiana Muñoz-Tuñón

17:55 - 18:25 Roberto Cid-Fernandes (I)

*Starlight analysis of galaxies in 1 and 3 D*

18:25 - 18:45 Enrique Pérez

*3D mass assembly and metal production in galaxies: CALIFA's perspective*

18:45 – 19:00 Rosa Gonzalez-Delgado

*Stellar metallicity gradients across the color-magnitude diagram*

## **THURSDAY APRIL 19TH**

### **SESSION II: METAL CONTENT, ENVIRONMENT AND FEEDBACK**

Chair: Josefa Masegosa

09:00 - 09:30 Lisa Kewley (I)

*Galaxy interactions and mergers: insights from IFS*

09:30 - 09:50 Jorge Iglesias-Páramo

*A 3-D view of the galaxy-wide shock in Stephan's Quintet*

09:50 - 10:10 Linda Smith

*IFU Observations of Galactic Winds in nearby Starburst Galaxies*

10:10 - 10:30 Simone Recchi

*The role of mass distribution of gas on the development of galactic winds*

10:30 - 10:45 Vallery Stanishev

*Type Ia Supernova host galaxies as seen with IFU spectroscopy*

10:45 - 11:30 Coffee break

Chair: Dominik Bomans

11:30 - 12:00 Guillermo Tenorio-Tagle (I)

*Supersonic line broadening within young and massive super star clusters in M82*

12:00 – 12:15 Isabel Pérez

*The formation of bulges: a comparison between the bulges of barred and unbarred galaxies*

12:15 - 12:30 Mercedes Mollá

*Interpreting OASIS data for NGC5430: the central region of a barred galaxy*

12:30 - 12:45 Adriana de Lorenzo-Cáceres

*Metals in 3D: the case of double-barred galaxies*

### **SESSION III: THE METAL CONTENT OF DISTANT GALAXIES**

12:45 - 13:15 Guillermo Blanc (I)

*Studying Galaxies at Low and High Redshifts with Wide-field IFUs*

13:15 – 13:35 Matthew Lehnert

*The Nature of the Warm-Ionized Medium in Distant Galaxies: Implications for Metallicity*

*Determinations*

13:35 – 13:50 Paulina Troncoso

*Metallicity gradients at  $z \sim 3$*

13:50 - 16:00 LUNCH

Chair: Roberto J. Terlevich

16:00 - 16:30 Thierry Contini (I)

*Where are the metals in high- $z$  galaxies? First results from MASSIV and prospects with MUSE*

16:30 - 16:50 Christian Maier

*The evolution of the mass-metallicity relation at  $0 < z < 2.5$  revealed by near-infrared spectroscopy with ISAAC and SINFONI IFS*

16:50 - 17:10 Daniel Kunth

*The intricacy of Lyman alpha transfer in local and distant galaxies*

17:10 - 17:50 Coffee break

17:50 - 18:10 Celine Peroux

*A SINFONI IFS survey for galaxy counterparts to damped Lyman-alpha systems*

18:10 - 18:25 Mickael Rigault

*Local properties of type Ia supernovae host galaxies*

### **SESSION IV : RECENT & FUTURE IFS DEVELOPMENT**

18:25 – 18:55 Armando Gil de Paz (I)

*MEGARA, 3D spectroscopy for GTC*

## **FRIDAY, APRIL 20TH**

Chair: Ángeles I. Díaz

09:00 – 09:20 Andreas Kelz

*Metals for metals: current large IFS developments*

09:20 - 09:40 Peter Weilbacher

*MUSE - Preparing for Observations with a Giant Integral Field Spectrograph*

09:40 – 10:00 Martin M. Roth

MUSE Survey of resolved stellar Populations in Local Volume Galaxies

10:00 - 10:30 Toersten Boeker (I)

*Integral-Field Spectroscopy from Space with JWST*

10:30 - 11:00 Santiago Arribas (I)

*HARMONI, an optical and near infrared IFS for the European ELT: Its potential for 3D metallicity studies*

11:00 – 11:40 Coffee break

11:40 - 11:55 Robert Content

*Very Large Field Integral Field Systems*

11:55 - 12:10 Valentina Luridiana

*PyNeb: a new tool for the analysis of IFU spectra*

12:10 - 13:30 Poster session

13:30 - 14:30 GENERAL DISCUSSION: J. M. Vílchez & J. Walsh

14:30 FAREWELL TAPAS