16:45-17:00 Jianan Li
Probing the Physical Conditions of the Interstellar and Circumgalactic Medium in the Early Universe

17:00-17:32 Poster session

17:32-18:00 Discussion

13 September

AGN II: chair Antonio Pensabene

9:30-10:00 Fabian Walter (invited)
Illuminating the Dark Ages: Luminous Quasars and Their Massive Host Galaxies in the Reionization Epoch
10:00-10:15 Tanio Diaz Santos
The ISM of the Most Luminous Obscured Quasar Revealed by ALMA and JWST
10:15-10:30 Yana Khusanova
The interstellar medium properties in the most radio-loud quasars at z>6
10:30-10:45 Theulé Patrice
AGN emission lines in high-redshift galaxies

10:45-11:15 coffee break

11:15-11:30 Federica Loiacono
A NIRSpec/IFU view of a quasar-galaxy merger at cosmic dawn
11:30-11:45 Michele Perna
Galaxy Assembly with JWST/NIRSpec IFS (GA-NIFS): the close environment of AGN at z~3-7
11:45-12:00 Chiara Circosta
Exploring the role of outflows driven by active galactic nuclei in the baryon cycle up to redshift ~1
12:00-12:15 Elena Bertola
The molecular view of AGN feedback at cosmic noon: do AGN gas-deplete their hosts?
12:15-12:30 Giovanna Speranza
Multi-phase outflows in local type-2 quasars

12:30-13:00 Discussion

13:00-13:15 Concluding remarks

13:15-14:00 lunch

Image NASA, ESA, CSA, STScI

SOC:
R. Decarli (INAF-OAS, co-chair), **F. Pozzi** (UniBo, co-chair), M. Aravena (UDP),F. Calura (INAF-OAS), S. Ellison (UVIC), S. Garcia-Burillo (IGN), A. Inoue (Waseda), D. Narayanan (UF), P. Oesch (UniGe), E. Schinnerer (MPIA), M. Talia (UniBo)

LOC:
M. Talia (UniBo, co-chair), **C. Vignali** (UniBo, co-chair), A. Enia (UniBo), F. Esposito (UniBo), F. Gentile (UniBo), F Loiacono (INAF-OAS), G. Mazzolari (UniBo), S. Quai (UniBo), O. Torbaniuk (UniBo), E. Veraldi (UniBo)

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA
DEPARTMENT OF PHYSICS AND ASTRONOMY "AUGUSTO RIGHI"
INAF ISTITUTO NAZIONALE DI ASTROFISICA
OAS BOLOGNA

ALMABO 2024

Views on the multi-phase interstellar medium in galaxies

Image NASA, ESA, CSA, STScI

Bologna (Italy)
9-13 September 2024
Alma Mater Studiorum - Giorgio Prodi Lecture Hall

9 September

9:00-9:30 Francesca Pozzi, Roberto Decarli, Margherita Talia
Welcome Talk

Local Galaxies I: chair Irene Shivaei

9:30-10:00 Karin Sandstrom (review)
A High Resolution View of the Interstellar Medium and Star Formation in Nearby Galaxies with JWST
10:00-10:15 Svea Hernandez
Dissecting the Mid-infrared Heart of M83 with JWST
10:15-10:30 Lara Pantoni
MICONIC: an unprecedented view of the nuclear and circum-nuclear ISM of nearby iconic galaxies by JWST MIRI-MRS
10:30-10:45 Sara Ellison
What is the most fundamental scaling relation for predicting star formation?

10:45-11:15 coffee break

11:15-11:45 Sharon Meidt (invited)
The contribution of gravity, rotation and pressure to the observed structure of gas disks
11:45-12:00 Vidhi Ritesh Tailor
Galactic Thermometers: Probing the Radial Gradient of Dust Temperature in Local Spiral Galaxies
12:00-12:15 Ryan Keenan
Molecular Gas Conditions and CO Line Excitation in Nearby Galaxies with AMISS
12:15-12:30 Yu-Hsun (Eltha) Teng
Re-evaluating Star Formation Efficiencies in Nearby Galaxies with a New α_CO Prescription

12:30-14:00 lunch

Local galaxies II: chair Leindert Boogaard

14:00-14:30 Almudena Alonso-Herrero (invited)
Dust and gas in the nuclear and circumnuclear regions of nearby Seyfert galaxies as revealed by JWST/MIRI
14:30-14:45 Lise Ramambason
Structure and porosity of the multiphase ISM: insights from resolved and unresolved galaxies
14:45-15:00 Miguel Querejeta
Unveiling the nature of spiral arms in PHANGS galaxies
15:00-15:15 Andrea Romanelli
Environmental dependance of GMC evolution and star formation in nearby galaxies

15:15-15:30 Elias Oakes
Are GMCs real? Searching for a virialized scale in NGC 253
15:30-15:45 María Jesús Jiménez Donaire
Key signatures of molecular gas: linking dense gas and star formation across a diverse set of environments

15:45-16:15 coffee break

16:15-16:30 Ilaria Ruffa
The origin of cold gas in nearby early-type galaxies
16:30-16:45 Blake Ledger
CN as a tool for dense gas studies in star-forming galaxies
16:45-17:00 Bronwyn Reichardt Chu
DUVET: How star formation-driven outflows regulate star formation
17:00-17:15 Francesco Bollati
On the origin and evolution of cold gas in galactic outflows
17:15-17:30 Michael Romano
The primary role of star-formation-driven outflows on the baryon cycle of nearby dwarf galaxies
17:30-17:45 Chevance Mélanie
The multi-phase structure ISM shaped by the baryon cycle in nearby galaxies

17:45-18:15 Discussion

10 September

Cosmic noon I: chair Romain Meyer

9:30-10:00 Miroslava Dessaiges-Zevadsky (review)
Star clusters shaping the morphology and tracing the ISM of galaxies out to the reionization epoch
10:00-10:15 Letizia Bugiani
Ionized Gas Emission in Quiescent Galaxies at Cosmic Noon with JWST
10:15-10:30 Rebecca Davies
Do AGN-driven outflows quench star-formation in massive z~2 galaxies?
10:30-10:45 Dominik Taylor
Testing ISM models using ALMA-observed CO excitation of z = 2-4, dusty star-forming galaxies

10:45-11:15 coffee break

11:15-11:45 Francesco Valentino (invited)
Painting galaxies growth and death at cosmic noon (and beyond)
11:45-12:00 Anita Zanella
Revealing the onset of star formation by studying high-redshift clumpy galaxies with ALMA
12:00-12:15 Patrick Kamieneski
Blowing dusty bubbles into the CGM: the contribution of dust-enshrouded starbursts to the baryon cycle
12:15-12:30 Boris Sindhu Kalita
Understanding the role of clumps in bulge formation using ALMA and JWST

12:30-14:00 lunch

Cosmic noon II: chair Marìa Jesùs Jiménez Donaire

14:00-14:30 Hiroyuki Hirashita (invited)
Theoretical understanding of dust evolution across cosmic time
14:30-14:45 Benedikt Diemer
A three-phase ISM model for the largest cosmological simulations
14:45-15:00 Antonio Pensabene
Witnessing the assembly of galaxies in a massive node of the Cosmic Web at z~3
15:00-15:15 Manuel Solimano
A MUSE+ALMA+JWST view into a strongly-lensed Lyman Alpha Halo at z=3
15:15-15:30 Irene Shivaei
Dust at Cosmic Noon with JWST and ALMA
15:30-15:45 Leindert Boogaard
The Cold ISM of Gas-Rich Galaxies Through Cosmic Time

15:45-16:15 coffee break

16:15-16:30 Alba Vidal García
CH+(1-0) in z~2-6 starburst galaxies: probes of extended reservoirs of multi-phasic turbulent gas
16:30-16:45 Toby Devereaux
Sub-kpc molecular gas morphology of 5 main-sequence galaxies at z~4.5 revealed by ALMA
16:45-17:00 Zhaoxuan Liu
Sub-kiloparsec study of the ISM and star formation in starbursts at z = 1.5
17:00-17:15 Fabrizio Gentile
Dark progenitors and massive descendants: an ALMA/JWST perspective on Radio-Selected NIRdark galaxies
17:15-17:30 Carlotta Gruppioni
The nature and fate of the most obscured high-z galaxies

17:30-18:00 Discussion

20:30 Outreach public event (italian language) - DamsLab

11 September

AGN I: chair Elena Bertola

9:30-10:00 Cristina Ramos Almeida (review)
AGN feeding and feedback from parsec to kiloparsec scales
10:00-10:15 Alejandra Rojas
Testing the Impact of outflows in the Molecular Gas Content of Nearby X-ray AGN
10:15-10:30 Santiago García-Burillo
The ALMA view of the gas cycle in nearby AGN
10:30-10:45 Iván Ezequiel López
Low-luminosity AGN Feedback: the ISM impact by the ADAF/radio-jet in M58

10:45-11:15 coffee break

11:15-11:45 Alessandro Lupi (invited)
Galaxy-black hole interplay in high-redshift active galactic nuclei: the impact of super-Eddington accretion
11:45-12:00 Xiaoyang Chen
Failed AGN feedback? -- Molecular reservoirs are not severely affected by extreme AGN ionized-wind in ULIRGs
12:00-12:15 Maria Vittoria Zanchettin
The spatially resolved star formation law in nearby AGN host galaxies
12:15-12:30 Cosimo Marconcini
From momentum to energy driven: the first proof of accelerating AGN outflows
12:30-12:45 Federico Esposito
The manifold ways of AGN feedback on the molecular gas: X-ray dominated regions and outflows

12:45-13:15 Poster session

20:00 Conference dinner

12 September

High redshift I: chair Melanie Chavance

9:30-10:00 Livia Vallini (review)
Zoom-in on the first galaxies: how to bridge theory and observations at the cosmic dawn
10:00-10:15 Masato Hagimoto
Porous Neutral Gas Nature of Interstellar Medium in a Lyman Break Galaxy at Redshift z = 8.312
10:15-10:30 Rychard Bouwens
[CII]-Selected Sample of Extremely High SFR Sources in the z>6 Universe: First Results from the New CISTERN Program
10:30-10:45 Vicente Villanueva
CRISTAL: A survey of gas, dust, and stars in star-forming galaxies when the Universe was ~1 billion years old

10:45-11:15 coffee break

11:15-11:45 Andreas Faisst (invited)
The ISM and dust properties of (post-)reionization galaxies probed by ALMA and JWST
11:45-12:00 Eleonora Parlanti
Multiphase outflows in a main sequence galaxy at z~5.5
12:00-12:15 Lizhi Xie
First quenched galaxies from the perspective of semi-analytic model
12:15-12:30 Mahsa Kohandel
Dynamically Cold Disks in the Early Universe: Myth or Reality?

12:30-14:00 lunch

High redshift II: chair Tanio Dìaz-Santos

14:00-14:30 Yoshinobu Fudamoto (invited)
Galaxy Evolution during the Cosmic Reionization: New Insights from ALMA and JWST
14:30-14:45 Bo Peng
Comprehensive View of Far-Infrared Fine Structure Lines: New Answers & New Questions
14:45-15:00 Denis Burgarella
Dust and Metal Evolution from z=4 to z=12 with the CIGALE code and JWST photo+spectrometric data
15:00-15:15 Prasad Sawant
Linking Gas, Dust, and Star Formation: Probing the baryonic cycle in early galaxies with the ALPINE survey
15:15-15:30 Ambra Nanni
Probing dust across cosmic time: early epoch Insights with the James Webb Space Telescope
15:30-15:45 Giacomo Venturi
Gas-phase metallicity gradients in early galaxies at z~6-8

15:45-16:15 coffee break

16:15-16:30 Ken-ichi Tadaki
Heating of Warm Gas in a Luminous Quasar at z=6
16:30-16:45 Romain Meyer
Pushing ALMA to the limit: 140-pc resolution [CII] and continuum observations of a z=6.6 quasar-galaxy merger