16:55-17:10: Gareth Jones Kinematics of *z*~4-6 Lyman Break Galaxies in ALPINE

17:10-17:25: Michele Ginolfi

[CII]-Line Properties and Star Formation-driven Outflows in high-z Galaxies: early results from ALPINE

17:25-18:00: Discussion

6 September - High-z

Chair: John Silverman

9:30-10:05: Renske Smit (review) An ALMA view of galaxies in the Epoch of Reionisation

10:05-10:20: Sander Schouws

New observations of Dust and [CII] in the Epoch of Reionization

10:20-10:35: Zhiyu Zhang

Top-heavy IMF found in dusty starburst galaxies across cosmic time

10:35-10:50: Shuowen Jin

Extremely cold dusty galaxies at z=4--6: first direct evidence of CMB impact on high-z galaxy observables

10:50-11:20: Coffee Break

11:20-11:45: Takuya Hashimoto (Invited) Properties of galaxies at $z \sim 6 - 9$ revealed by ALMA

11:45-12:00: Valentina D'Odorico *Witnessing galaxy assembly at the reionization epoch*

12:00-12:15: Tao Wang On the nature of HST-dark sources revealed by ALMA

12:15-12:30: Stefano Carniani ALMA witnesses assembly of firs<u>t galaxies</u>

12:30-12:45: Miroslava Dessauges-Zavadsky *Molecular clouds in a Milky Way progenitor observed 8 billion years ago*

12:45-13:00: Seiji Fujimoto

First Identification of 10-kpc Scale [CII] 158um Halos around Star-Forming Galaxies at z=5-7

13:00-13:30: Discussion and concluding remarks



<u>SOC:</u>

Francesca Pozzi – co-chair Roberto Decarli – co-chair Alberto Bolatto Andrea Cimatti Francoise Combes Carlotta Gruppioni Roberto Maiolino Masami Ouchi Gergö Popping John Silverman Linda Tacconi Margherita Talia Livia Vallin

LOC:

Margherita Talia – co-chair Cristian Vignali – co-chair Roberto Gilli Marcella Massardi Francesca Pozzi Quirino D'Amato Federica Loiacono Matilde Mingozzi Antonio Pensabene Giovanni Sabatini Francesco Salvestrini



Views on the Interstellar Medium in Galaxies in the ALMA Era



BOLOGNA, ITALY *ALMA MATER STUDIORUM San Giovanni in Monte* September 2-6, 2019

2 September – Local Universe

8:30: Registration opens

9:00-9:30: Roberto Decarli – Francesca Pozzi Welcome Talk

Chair: Marcella Massardi

9:30-10:05: Adam Leroy (review) ALMA Brings Molecular Gas in Galaxies Into Focus

10:05-10:20: Jiayi Sun PHANGS-ALMA: Demographics and Environmentdependence of Molecular Cloud Properties

10:20-10:35: Andreas Schruba The Cloud-scale Baryon Cycle of Nearby Galaxies

10:35-10:50: Timothy Davis Parsec scale views of the molecular gas in bulges with WISDOM

10:50-11:20: Coffee Break

11:20-11:45: Alberto Bolatto (Invited) The Central Engine and Outflows in the Nuclear Starburst of NGC 253

11:45-12:00: Jeff Mangum

ALCHEMI: First Results from the ALMA Comprehensive High-resolution Extragalactic Molecular Inventory of NGC253

12:00-12:15: Nico Krieger

A detailed ALMA look into the NGC253 starburst and its connection to the Galactic Center

12:15-12:30: Melanie Chevance

A systematic characterization of the evolutionary cycling between molecular clouds, star formation, and feedback in nearby galaxies.

12:30-14:00: Lunch

Chair: Miroslava Dessauges-Zavadsky

14:00-14:25: Amelie Saintonge (invited) Molecular gas and dust in the nearby Universe: the global perspective

14:25-14:40: Dieter Lutz Molecular outflows in the local universe

14:40-14:55: Loreto Barcos-Muñoz Star Formation and ISM Properties in Local U/LIRGs at GMC scales: The Case of Arp 220 **14:55-15:10: Katie Jameson** The first large, unbiased ALMA survey of CO at parsec resolution in the Small Magellanic Cloud

15:10-15:25: Matilde Mingozzi Investigating the ISM of local Seyfert galaxies by modelling their CO SLED

15:25-16:00: Coffee break

16:00-16:15: Isabella Cortzen PAHs trace the molecular gas in star-forming galaxies

16:15-16:30: Deanne Fisher Star Formation in Turbulent, Clumpy Disk Galaxies

16:30-16:45: Christine Wilson Dense gas and star formation in nearby galaxies with a range of morphologies

16:45-17:00: Viviana Casasola Definitive view of the ISM in the Local Universe

17:00-17:15: Rosita Paladino Dust polarization measurements in nearby galaxies to investigate magnetic fields in cold gas

17:15-17:30 : Nikki Zabel How the cluster environment affects the baryon cycle

17:30-17:45: Ashley Bemis Star Formation and Dense Gas in Extreme Environments with ALMA

17:45-18:15: Discussion

3 September - AGN

Chair: Carlotta Gruppioni

9:30-10:05: Bram Venemans (review) (Sub)millimetre observations of *z*>6 quasar hosts: massive galaxy formation in the epoch of reionisation

10:05-10:20: Mladen Novak Interstellar medium in the early universe: a multiline ALMA survey of a redshift 7.5 quasar

10:20-10:35: Antonio Pensabene The ALMA view of quasars host galaxies at the dawn of cosmic time

10:35-10:50: Tanio Diaz-Santos ALMA Reveals the Interstellar Medium Dynamics of Hyper-luminous Obscured Quasars

10:50-11:20: Coffee Break

11:20-11:45: Marcella Brusa (Invited) The molecular gas content of obscured Quasars at high-z

11:45-12:00: Vincenzo Mainieri The role of AGN-feedback in the baryon cycle of z~2 galaxies: what we learn from the ionized and molecular gas kynematics

12:00-12:15: Giulia Rodighiero AGN in dusty Starbursts at z=2: feedback still to kick in

12:15-12:30: Quirino D'Amato On the dust and gas content of high-redshift galaxies hosting obscured AGN in the CDF-S

12:30-14:00: Lunch

Chair: Cristian Vignali

14:00-14:25: Susanne Aalto (invited) Feeding and feedback in dusty galaxy nuclei and AGNs

14:25-14:40: Tom Oosterloo Molecular outflows in young AGN

14:40-14:55: Anelise Audibert Feeding and Feedback in NUclei of GAlaxies (NUGA)

14:55-15:10: Manuela Bischetti The gentle monster PDS456 as seen by ALMA: implications for AGN feedback

15:10-15:25: Masatoshi Imanishi ALMA dense molecular gas survey of nearby ultraluminous infrared galaxies

15:25-16:00: Coffee break

16:00-16:15: Irina Smirnova-Pinchukova The Close AGN Reference Survey: Discovering a [CII] line excess in a multi-phase AGN- driven outflow

16:15-16:30: Federico Lelli Gas dynamics at z=4.8 with high-resolution ALMA observations

16:30-16:45: Andrea Enia Zoom-in on the dust-obscured phase of galaxy formation with gravitational lenses

16:45-17:00: Matthew Doherty A magnified view of the ISM and star formation in a strongly lensed AGN hosting SMG at *z* = 2.6

17:00-17:30: Poster Session

17:30-18:00: Discussion

4 September - Theory

Chair: Livia Vallini

9:30-10:05: Desika Narayanan (review) A theoretical view of dust in galaxies near and far

10:05-10:20: Lichen Liang Probing ISM conditions of high redshift galaxies with dust emission: A view from the FIRE simulations

10:20-10:35: Mahsa Kohandel Kinematics of z≥6 galaxies from [CII] line emission

10:35-10:50: Andrea Pallottini The interstellar medium and radiation field of the galaxies in the Epoch of Reionization

10:50-11:20: Coffee Break

11:20-11:45: Francesco Calura (Invited) Scaling relations and interstellar dust mass budget in galaxies

11:45-12:00: Alessandro Lupi Kinematics and dynamics of molecular gas in high redshift quasars

12:00-12:15: Rowan Smith Introducing the Cloud Factory: How galactic scale forces affect cloud morphology and dynamics

12:15-12:30: Diederik Kruijssen The baryon cycle from molecular clouds to galaxies

12:30-12:45: Thales Gutcke Resolving chemistry and clouds on galactic scales

12:4-13:15: Poster Session

5 September – Survey

Chair: Margherita Talia

9:30-10:05: Manuel Aravena (review) The new era of galaxy evolution studies from sensitive molecular and dust deep field surveys

10:05-10:20: Melanie Kaasinen Comparing Molecular Gas Tracers at *z*~2: Do CO and dust continuum emission trace the same regions of the ISM?

10:20-10:35: Rychard Bouwens Dust Emission from z>=2 Lyman-Break Galaxies in the HUDF ASPECS Program **10:35-10:50: Caitlin Casey** Constraints on the ISM dust-temperatures of galaxies across cosmic time

10:50-11:20: Coffee Break

11:20-11:45: Rodrigo Herrera-Camus (invited) *Molecular gas properties of typical galaxies and their outflows at z~1-3*

11:45-12:00: Helmut Dannerbauer Impact of environment on molecular gas reservoirs probed in distant cluster and field galaxies

12:00-12:15: Bitten Gullberg High resolution ALMA imaging of SMGs

12:15-12:30: Paolo Cassata Probing the molecular gas content of normal starforming galaxies at 3 < z < 3.5 with ALMA

12:30-14:00: Lunch

<u>Chair: Dieter Lutz</u>

14:00-14:25: Matus Rybak (invited) Dissecting sub-millimeter galaxies: ALMA studies of dust and gas on (sub-)kpc scales

14:25-14:40: Francesco Valentino A survey of atomic carbon [CI] in normal main sequence galaxies at high redshift

14:40-14:55: Patrick Kamieneski Gas and star formation at sub-100 pc scales in lensed hyper-luminous SMGs at Cosmic Noon

14:55-15:10: Bunyo Hatsukade ALMA twenty-six arcmin² survey of GOODS-S at one millimeter (ASAGAO)

15:10-15:25: Chentao Yang Studying the ISM in high-redshift strongly gravitational lensed galaxies in the ALMA era

15:25-16:00: Coffee break

16:00-16:25: Matthieu Bethermin (invited) Exploring the [CII] and the dust continuum with the ALPINE survey: first scientific results

16:25-16:40: Federica Loiacono Cold gas across cosmic time from CO and [C II] serendipitous discoveries

16:40-16:55: Yoshinobu Fudamoto Dust Attenuation of Star-Forming Galaxies in the First 2Gyr of the Universe