#### CRISOL25 meeting program v1.38

May 12-16, 2025, Toledo (Spain)

Link to updated version of program.
Link to list of talk abstracts.
Link to list of poster abstracts.

#### Monday May 12, 2025

Morning session 01 (Redshift Frontier) chair: Karina Caputi			
08:00-08:45	Registration		
08:45-09:00	Welcome	Pablo G. Pérez-González & Irene Shivaei	
09:00-09:45	Invited: The Cosmic Crisol in the JWST era: insights and puzzles from an observational and theoretical perspective	Rachel Somerville Mark Dickinson	
09:45-10:00	Luminous galaxies in the early Universe	Stefano Carniani	
10:00-10:15	How did it all start? Searching for galaxies 100-300 Myr after the Big Bang	Marco Castellano	
10:15-10:30	A Glimpse of an Ultra-Faint ~10^5 Msun PopIII Galaxy Candidate Through Abell S1063	Seiji Fujimoto	
10:30-10:45	Constraining the Topology of Cosmic Reionization Using NIRCam WFSS Observations	Yongda Zhu	
10:45-11:00	Metallicity of galaxies at the tail-end of the Epoch of Reionisation	Gauri Kotiwale	
11:00-11:30	Posters and coffee break		
11:30-11:45	Evidence for Radiation-Dominated Feedback in Nearby Analogs to Early Starbursts	Lena Komarova	
11:45-12:00	Galaxy Mergers in the Epoch of Reionization	Qiao Duan	
12:00-12:15	A first look at the ionised gas kinematics of high-redshift galaxies	Lola Danhaive	
12:15-12:30	JWST Measurements of [O/Fe] Ratios and Implications for Chemical Enrichment in Early Galaxies at z~10	Minami Nakane	
12:30-13:00	Poster flash talks		

13:00-15:00 Lunch break
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Afternoon session 02 (Redshift Frontier) chair: Tanio Diaz Santos			
15:00-15:30	Invited: Census of high-z galaxies (online)	Rohan Naidu	
15:30-15:45	An evolved protocluster in the early Universe: the birth of an ionised bubble and the (likely temporary) death of its resident galaxies	Callum Witten	
15:45-16:00	SAPPHIRES: Slitless Areal Pure-Parallel High-Redshift Emission Survey	Eiichi Egami	
16:00-16:15	JWST Wide Field Spectroscopic Study of Galaxy Over-Density at z=8.47	Yoshinobu Fudamoto	
16:15-16:30	Probing Intense Activity Inside a "Cosmic Crucible" at z=12 with JWST and ALMA	Jorge Zavala	
16:30-16:45	Formation of galaxies at cosmic dawn by feedback-free starbursts	Zhaozhou Li	
16:45-17:15	Posters and coffee break		
17:15-17:30	A Glimpse of the New Redshift Frontier (online)	Vasily Kokorev	
17:30-17:45	Digging into the nature of GNz11: rest-frame optical MIRI imaging	Alejandro Crespo Gómez	
17:45-18:45	Discussion panel: redshift frontier	Andrea Ferrara, Steve Finkelestein, Pascal Oesch, Adriano Fontana, Rachel Somerville	

	Welcome cocktail at Museo Santa Cruz, venue kindly offered by Junta de Castilla La Mancha (regional government)
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# Tuesday May 13, 2025

Morning	n Mobasher	
09:00-09:30	Invited: The rapid rise of massive quiescent galaxies in the first 2 Gyr	Anna de Graaff
09:30-09:45	Dynamical evidence of an overmassive black hole in a quiescent galaxy at z=2	Drew Newman
09:45-10:00	MIDIS: Unveiling the Star Formation History in massive galaxies at 1 <z<4.5 analysis<="" spectro-photometric="" td="" with=""><td>Marianna Annunziatella</td></z<4.5>	Marianna Annunziatella
10:00-10:15	Galaxy assembly in the first billion years: Mini-quenching and more evidence for bursty SFHs	Tobias Looser
10:15-10:30	Investigating the abundance and nature of high-z quiescent galaxies	William Baker
10:30-10:45	Reconstructing the Histories of Dust-Rich Quiescent Galaxies up to $z \sim 3$	Darko Donevski
10:45-11:00	Poster flash talks	
11:00-11:30	Posters and coffee break	
11:30-11:45	REBELS with ALMA & JWST: The build-up of massive galaxies in the early Universe	Lucie Rowland
11:45-12:00	Mind the gap: numerical experiments between kilo-parsec and parsec scale at high-redshift	Eden Girma
12:00-12:15	Unveiling the UV-brightest monsters in the distant Universe	Miroslava Dessauges- Zavadsky
12:15-12:30	Revealing the complex morphologies of high-z disk galaxies with JWST	Luca Costantin
12:30-12:45	Resolving star formation at Cosmic Noon using WFSS	Nor Pirzkal
12:45-13:00	The emergence of the Hubble sequence as seen by COSMOS-Web (online)	Marc Huertas-Company

13:00-15:00	Lunch break				
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Afternoon session 04 (Stellar populations) chair: Stefano Carniani			
15:00-15:30	Invited: Unveiling the physical properties of the earliest galaxies: current mysteries and challenges revealed by JWST Surveys	Emma Curtis-Lake	
15:30-15:45	Importance of mergers in driving star formation and black hole activity from Cosmic Noon to Cosmic Dawn	David Puskas	
15:45-16:00	The burstiness and mass dependence of star formation in low mass galaxies at z~4-5	Claudia di Cesare	
16:00-16:15	3,000 Hα emitters at z~4-7: a new tracer of galaxy build-up in the first ~1.5 Gyr	Alba Covelo Paz	
16:15-16:30	Old stellar populations and hot gas in the most distant galaxies - JWST/MIRI results from the MIDIS-RED project.	Jens Melinder	
16:30-17:00	Posters and coffee break		
17:00-17:15	Exploring Galaxy Interactions in the Early Universe through Resolved Hα Emission	Carlota Prieto Jiménez	
17:15-17:30	Revealing the parsec-scales details of high-z star-forming systems with JWST	Matteo Messa	
17:30-18:30	Discussion panel: galaxy assembly	Mauro Giavalisco, Harley Katz, Jeyhan Kartaltepe, Paola Santini, Mauro Stefanon	

19:15-21:15	Guided city tour around Toledo and private visit to church with El Greco masterpiece El
	Entierro del Señor de Orgaz (19:15 sharp in Zocodover Square)

19:00-20:00	Public talk by Luca Costantin at <u>Sala Capitular Ayuntamiento de Toledo</u> , kindly
	organized by Ayuntamiento de Toledo (Town Hall)

## Wednesday May 14, 2025

	Morning session 05 (ISM) chair: Darko Donevski			
09:00-09:30	Four problems with dust in the early Universe that should keep you awake at night	Desika Narayanan		
09:30-09:45	Investigating The Dust Attenuation Properties of 12 Massive Galaxies Using REBELS JWST NIRSpec and ALMA Observations	Rebecca Fisher		
09:45-10:00	Forging the First Dust – Transition from Stellar to ISM Grain Growth in the Early Universe	Denis Burgarella		
10:00-10:15	What made the dust so hot in a z = 8.3 galaxy? Case Study of MACS0416-Y1	Anishya Harshan		
10:15-10:30	The formation of dust in the early Universe	Hiddo Algera		
10:30-10:45	Origins of Carbon Dust in a JWST-Observed Primeval Galaxy at z~6.7	Ambra Nanni		
10:45-11:15	Posters and coffee break			
11:15-11:45	Cosmic Cradles: The ISM and Nebular Properties of Early Galaxies revealed by JWST	Mirko Curti		
11:45-12:00	Probing chemical enrichment in star-forming galaxies using oxygen and argon abundances	Souradeep Bhattacharya		
12:00-12:15	Tracing the chemical enrichment pathways of high-redshift star-forming galaxies	Thomas Stanton		
12:15-12:30	Gas-phase metallicity gradients in galaxies at z~6-8	Giacomo Venturi		
12:30-12:45	Advanced Metallicity Determination with HOMERUN: New Frontiers in JWST Observations	Alessandro Marconi		
12:45-13:00	Exploring the high-z ISM with HOMERUN	Bianca Moreschini		

13:00- <u><b>14:30</b></u>	Lunch break
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Afternoon session 06 (ISM) chair: Mahsa Kohandel			
14:30-14:45	Exploring multi-phase chemical mixing in high-z analogues: new insights into nitrogen enrichment	Bethan James	
14:45-15:00	A multi-tracer, kpc-scale view of the gas, dust and stars in z~3 submillimeter galaxies	Beth Westoby	
15:00-15:15	Revealing the parsec-scales details of high-z star-forming systems with JWST	Mahmoud Hamed	
15:15-15:30	The cold gas of star-forming galaxies at cosmic noon	Ivanna Langan	
15:30-15:45	Efficient Ionizers with Low H-beta+[OIII] Equivalent Widths: JADES Spectroscopy of a Peculiar High-z Population	Isaac Laseter	
15:45-16:00	Spatially resolved properties of ionized outflows in star-forming galaxies from $z=3$ to $9$	Bruno Rodríguez del Pino	
16:00-16:30	Posters and coffee break		
16:00-16:30	The role of multiphase galactic outflows in regulating star formation in the era of JWST	Ulrich Steinwandel	
16:45-17:00	Exploring feedback in high-z galaxies through the eyes of ALMA and JWST	Eleonora Parlanti	
16:45-17:45	Discussion panel: ISM (dust and gas) in the early Universe	Andy Bunker, Chiaki Kobayashi, Giulia Rodighiero, Irene Shivaei, Laura Sommovigo	

	Conference dinner at <u>Cigarral del Ángel Custodio</u> , buses to leave from <u>Hacienda del Cardenal</u> at 19:30.
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# Thursday May 15, 2025

Morning session 07 (AGN) chair: Andrew Blain		
<b>10:00-</b> 10:30	The population of black holes in the early Universe and their interplay with galaxies in the JWST era	Roberto Maiolino
10:30-10:45	GA-NIFS: A high number of dual AGN at z ~ 3	Michele Perna
10:45-11:00	The X-rays Strike Back: unlocking the formation of SMBHs in quasars at early cosmic times	Alessia Tortosa
11:00-11:15	JWST MIRI reveals the diversity of nuclear mid-infrared spectra of nearby type-2 quasars	Cristina Ramos Almeida
11:15-11:30	Seeking the rise of the first Massive Black Holes: evidence for an early super-Eddington growth?	Alessandro Trinca
11:30-12:00	Posters and coffee break	
12:00-12:15	Bubbles, outflows and lurking BHs: the novel JWST/NIRSpec view of high-z AGN	Giovanni Cresci
12:15-12:30	Discovery of two z~6.5 post-quasar galaxies in large ionised bubbles	Romain Meyer
12:30-12:45	GA-NIFS: Resolving AGN outflow properties at z~3-6 with JWST NIRSpec	Elena Bertola
12:45-13:00	Powerful nuclear outflows and circumgalactic medium shocks driven by the most luminous quasar in the Universe	Tanio Diaz Santos

13:00-14:30	Lunch break
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Afternoon session 08 (AGN) chair: Yoshi Fudamoto		
1 11.20 11.15	Physical Pathways for JWST-Observed Supermassive Black Holes in the Early Universe (online)	Junehyoung Jeon
I 14·45-15·00	Revolutionizing the Study of Reionization-Era Quasar Environments with ASPIRE	Jackie Champagne

15:00-15:15	The role of ISM substructure in shaping multiphase AGN outflows	Samuel Ward
15:15-15:30	Remembrance of AGN models past: Learning the physical conditions	Aswin Vijayan
15:30-15:45	A JWST-ALMA synergy to unveil the early co-evolution of galaxies and supermassive black-holes	Francesco Salvestrini
15:45-16:00	Revealing supermassive black holes in the early universe using photometric variability	Alice Young
16:00-16:30	Give me a break: The Ambiguous Nature of Little Red Dots	Jenny Greene

17:00-18:00	Private visit to historic tapestry exposition with a representation of 13th century Tablas Alfonsíes, kindly offered by Ayuntamiento de Toledo (Town Hall) and Catedral Primada de Toledo (most important cathedral in Spain from 1088 onwards, awarded by Pope Urbano II).
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## Friday May 16, 2025

Morning session 09 (LRDs) chair: Cristina Ramos Almeida		
09:00-09:15	Broad-Line AGN at $3.5 < z < 6$ : The Black Hole Mass Function and a Connection with Little Red Dots	Anthony Taylor
09:15-09:30	Evolved Stellar Populations at z $\sim$ 7 - 8 in Little Red Dots Identified with JWST/NIRSpec	Bingjie Wang
09:30-09:45	The Host Galaxy (If Any) of the Little Red Dots	Changhao Chen
09:45-10:00	Challenging the AGN scenario for JWST/NIRSpec broad H-alpha emitters/Little Red Dots in light of non-detection of NIRCam photometric variability and X-ray	Mitsuru Kokubo
10:00-10:15	Dissecting Little Red Dots: Spatially resolved spectroscopy of faint broad-line AGN	Alberto Torralba
10:15-10:30	Unveiling Broadened Emission in LRDs: A Statistical Simultaneous Spectral Analysis with RUBIES NIRSpec	Raphael Hviding
10:30-11:00	Poster awardee talks	TBD
11:00-11:30	Coffee break	
11:30-11:45	The discovery of dual and offset "little red dots" with a pixel-by-pixel color selection method	Takumi Tanaka
11:45-12:00	Balmer Decrements in Little Red Dots: Investigating High-Redshift AGN Attenuation	Vanessa Brown
12:00-13:00	Discussion panel: AGN (and LRDs)	Yuichi Harikane, Michaela Hirschmann, Dale Kocevski
13:00-13:10	Closing remarks and adjourn	