

Astrophysics and Space Science in Marche I

AGN Feedback and Star Formation Across Cosmic Scales and Time

Teatro Cortesi, Sirolo, Italy, September 2 - 6, 2024

Monday Morning, September 2		
Section : <i>Star Formation Across Cosmic Time</i> Chair : Paola Santini		
8:30 - 9:00	Registration	
9:00 - 9:15	Welcome	
9:15 - 9:45	Amelie Saintonge	Review Talk <i>Fuelling star formation across cosmic time</i>
9:45 - 10:00	Ambra Nanni	Contributed Talk <i>Probing dust origins: the James Webb Space Telescope and insights from Type II Supernovae in early epochs</i>
10:00 - 10:15	Francesca Annibali	Contributed Talk <i>The role of interactions in regulating star formation in dwarf galaxies</i>
10:15 - 10:30	Michael Romano	Contributed Talk <i>The imprint of star-formation-driven outflows on the evolution of dwarf galaxies</i>
10:30 - 10:35	Yaherlyn Diaz	Flash Talk <i>Probing Star Formation Rates: An In-Depth Analysis of the 11.3 microns PAH Feature as a Star formation rate Estimation Tool</i>
10:35 - 10:40	Prasad Sawant	Flash Talk <i>Linking Gas, Dust, and Star Formation: Probing the baryonic cycle in early galaxies with the ALPINE survey</i>
10:40 - 10:45	Leonardo de Albernaz Ferreira	Flash Talk <i>Star Formation Evolution along the Merger Sequence in CFIS</i>

10:45 - 11:15	Coffee Break	
11:15 - 11:40	Annagrazia Puglisi	Focus Talk <i>Star formation and feedback in galaxies at cosmic noon</i>
11:40 - 11:55	Felix Mirabel	Contributed Talk <i>Black hole feedback and gas-rich mergers enhance star formation in the early universe</i>
11:55 - 12:10	Antonello Calabrò	Contributed Talk <i>Exploring the evolution of the SFR and SFR surface density in galaxies since cosmic dawn</i>
12:10 - 12:25	Zhaoxuan Liu	Contributed Talk <i>JWST and ALMA discern the assembly of structural and obscured components in high-redshift starburst galaxies</i>
12:25 - 15:30	Lunch	

	Monday Afternoon, September 2	
	Section : <i>Simulations</i> Chair : Stefano Borgani	
15:30 - 16:00	Debora Šijački	Review Talk <i>The complex lives of AGN and their host galaxies</i>
16:00 - 16:15	Nikhil Arora	Contributed Talk <i>Quantifying the inner halo response to active galactic nuclei feedback in galaxies</i>
16:15 - 16:30	Benedetta Casavecchia	Contributed Talk <i>COLDSim: High redshift [C II] emission in cosmological simulation resolving H₂, H I and H II</i>
16:30 - 17:00	Coffee Break	
17:00 - 17:25	Milena Valentini	Focus Talk <i>Modeling star formation and AGN feedback in cosmological simulations</i>
17:25 - 17:40	Dylan Nelson	Contributed Talk <i>Supermassive black holes and AGN feedback in the most massive clusters</i>

17:40 - 17:55	Annalisa Pillepich	Contributed Talk <i>From TNG-Cluster to XRISM: understanding the kinematics of the core of Perseus-like clusters</i>
17:55 - 18:10	Shoshannah Byrne-Mamahit	Contributed Talk <i>Feeding Supermassive Black Holes with Galaxy Interactions</i>
18:10 - 18:25	Stefano Sotira	Contributed Talk <i>Studying the energy injection and turbulent pattern of AGN in galaxy clusters</i>
18:25 - 18:35	Welcome by the major of Sirolo	
18:35 -	Welcome Drink	

	<p>Tuesday Morning, September 3</p> <p>Section : <i>AGN Feedback in Radio</i></p> <p>Chair : Gianluca Castignani</p>	
9:00 - 9:30	Françoise Combes	Review Talk <i>Active Galactic Nuclei (AGN) and molecular tori with ALMA</i>
9:30 - 9:45	Iván Ezequiel López	Contributed Talk <i>How Low-Luminosity AGN impacts their host galaxies: the M58 case</i>
9:45 - 10:00	Tom Rose	Contributed Talk <i>Observing cold accretion via molecular absorption lines</i>
10:00 - 10:15	Elena Bertola	Contributed Talk <i>The molecular view of AGN feedback at cosmic noon: do AGN gas-deplete their hosts?</i>
10:15 - 10:45	Coffee Break	
10:45 - 11:10	Raffaella Morganti	Focus Talk Radio jets expanding in gas-rich ISM: using cold gas to trace their impact
11:10 - 11:25	Roberta Tripodi	Contributed Talk <i>Investigating the SFR and SMBH-galaxy co-evolution in QSOs at $z > 6$</i>

11:25 - 11:40	Caroline Bertemes	Contributed Talk <i>The early and late phases of AGN feedback: a JWST and NOEMA view across redshifts out to Cosmic Noon</i>
11:40 - 11:55	Anelise Audibert	Contributed Talk Feedback from low-power radio jets in "radio-quiet" quasars
11:55 - 15:30	Lunch	

<p>Tuesday Afternoon, September 3</p> <p>Section : <i>Properties of AGN in Optical and Infrared</i> Chair : Carlotta Gruppioni</p>		
15:30 - 16:00	Roberto Maiolino	Review Talk <i>AGN feedback across the cosmic epochs as traced by optical and infrared observations</i>
16:00 - 16:25	Sylvain Veilleux	Focus Talk <i>AGN Feedback in the Optical and Infrared</i>
16:25 - 16:40	Giovanni Cresci	Contributed Talk <i>Bubbles, outflows and lurking BHs: the novel JWST/NIRSpec view of high-z AGN feedback and star formation</i>
16:40 - 17:10	Coffee Break	
17:10 - 17:15	Giustina Vietri	Flash Talk <i>Extremely high-velocity UV outflows in the most luminous QSOs at cosmic noon: discovery, implications & perspectives</i>
17:15 - 17:20	Enrica Bellocchi	Flash Talk <i>Tracing the ionized gas phase of low-power jet-ISM interaction in NGC7319 with MEGARA/GTC</i>
17:20 - 17:25	Lorenzo Ulivi	Flash Talk <i>Exploring the Nuclear Region of Arp220 with NIRSpec@JWST</i>
17:25 - 17:30	Evgenia Koutsoumpou	Flash Talk <i>The impact of Cosmic Ray feedback on the nebular gas in nearby AGN and starburst galaxies</i>

17:30 - 17:45	Giacomo Venturi	Contributed Talk <i>GA-NIFS: The properties of AGN outflows at z~3-6 with JWST NIRSpec</i>
17:45 - 18:00	Eleonora Parlanti	Contributed Talk <i>Early-stage feedback in a heavily obscured AGN at z=4.76</i>
18:00 - 18:15	Aayush Saxena	Contributed Talk <i>Widespread AGN feedback in a forming brightest cluster galaxy at z = 4.1 unveiled by JWST</i>

	Wednesday Morning, September 4 Section : <i>Quenching and Quiescent Galaxies</i> Chair : Sirio Belli	
9:00 - 9:30	Katherine Whitaker	Review Talk <i>A Review of Massive Galaxy Formation</i>
9:30 - 9:45	Aliza Beverage	Contributed Talk <i>Chemical Clues to Quenching: Elemental abundances of massive quiescent galaxies across cosmic time</i>
9:45 - 9:50	Letizia Scalon	Flash Talk <i>The impact of stellar bars on quenching star formation: insights from a spatially resolved analysis in the local Universe</i>
9:50 - 9:55	Letizia Bugiani	Flash Talk <i>Investigating Ionized Gas Emission in Quiescent Galaxies at Cosmic Noon with JWST</i>
9:55 - 10:00	Patrick Kamieneski	Flash Talk <i>The role of dust-enshrouded star formation in quenching galaxies</i>
10:00 - 10:30	Coffee Break	
10:30 - 10:55	Adam Carnall	Focus Talk <i>Studying the first massive quiescent galaxies with JWST EXCELS</i>
10:55 - 11:10	Rebecca Davies	Contributed Talk <i>AGN-driven neutral gas outflows - a key driver of fast quenching at z~2?</i>

11:10 - 11:25	Minjung Park	Contributed Talk <i>Fast, slow, and multiple quenching of galaxies at cosmic noon</i>
11:25 - 11:40	Po-Feng Wu	Contributed Talk <i>The clues of quenching from star, gas, and star formation in distant post-starburst galaxies</i>
11:40 - 11:55	William Baker	Contributed Talk <i>The black hole mass metallicity relation and insights into galaxy quenching</i>
11:55 - 12:10	Emiliano Merlin	Contributed Talk <i>Passive galaxies at the dawn of the Universe</i>
12:10 - 12:25	Anita Zanella	Contributed Talk <i>How is star formation quenched at high redshift? Looking for clues by studying the large molecular gas fraction of post-starburst galaxies at $z > 1$</i>
12:25 - 19:30	Lunch & Free Afternoon with Social Activities	
19:30 -	Social Dinner	

	Thursday Morning, September 5 Section : <i>Clusters and Dense Environments</i> Chair : Laura Pentericci	
9:00 - 9:30	Brian McNamara	Review Talk <i>A Modern View of Atmospheric Cooling & Feedback in Clusters</i>
9:30 - 9:45	Tom Oosterloo	Contributed Talk <i>Closing the feedback-feeding loop of the radio galaxy 3C84</i>
9:45 - 10:00	Benjamin Vigneron	Contributed Talk <i>High resolution imaging and spectroscopy of AGN feedback in the Perseus cluster of galaxies</i>
9:45 - 9:50	Alba Vidal García	Flash Talk <i>Where infall meets outflows: turbulent dissipation probed by CH^+ and $\text{Ly } \alpha$ in the starburst / AGN galaxy group SMMJ02399-0136 at $z = 2.8$</i>

10:05 - 10:10	Francesco Ubertosi	Flash Talk <i>Novel insights on AGN feedback in galaxy clusters: the onset and maintenance of powerful jet activity</i>
10:10 - 10:40	Coffee Break	
10:40 - 11:05	Valeria Olivares	Focus Talk <i>The Many Phases of the Filaments in Central Cluster Galaxies</i>
11:05 - 11:20	Ana Jimenez-Gallardo	Contributed Talk <i>A Chandra-MUSE view of feedback in radio galaxies</i>
11:20 - 11:35	Andrea Travascio	Contributed Talk <i>Probing the MQN01 Cosmic Structure: Unveiling the Densest Population of AGN through Chandra Observations</i>
11:35 - 11:50	Fabio Vito	Contributed Talk <i>Enhanced fast SMBH growth in gas-rich protoclusters at $z=4$</i>
11:50 - 15:30	Lunch	

	Thursday Afternoon, September 5 Section : <i>AGN feedback in X-rays</i> Chair : Francesco Tombesi	
15:30 - 16:00	David Alexander	Review Talk <i>AGN Feedback and Star Formation: the perspective from X-ray surveys</i>
16:00 - 16:15	Federica Ricci	Contributed Talk <i>Extreme QSO feedback unveiled in a massive starburst at the golden epoch of galaxy evolution</i>
16:15 - 16:30	Satoshi Yamada	Contributed Talk <i>X-ray Winds In Nearby-to-distant Galaxies (X-WING) - I: Legacy Surveys of Galaxies with Ultrafast Outflows and Warm Absorbers in $z \sim 0-4$</i>
16:30 - 17:00	Coffee Break	
17:00 - 17:25	Marcella Brusa	Focus Talk <i>The X-ray view of AGN winds</i>

17:25 - 17:40	Giorgio Lanzuisi	Contributed Talk <i>AGN Ultra Fast Outflows across Cosmic time</i>
17:40 - 17:55	Alejandra Rojas	Contributed Talk <i>Testing the Impact of AGN on Their Host Galaxies Across Different Wavelengths</i>
17:55 - 18:10	Alfredo Luminari	Contributed Talk <i>Time-Evolving Photoionisation in the XRISM era</i>

Friday Morning, September 6		
Section : The Inner Regions of AGN Chair : Orlando Luongo		
9:00 - 9:30	Feng Yuan	Review Talk <i>AGN and black hole accretion physics at all accretion rates</i>
9:30 - 9:45	Mojtaba Raouf	Contributed Talk <i>Impact of AGN feedback on the dynamics of gas; A Review across Diverse Environments</i>
9:45 - 10:00	Eleonora Torresi	Contributed Talk <i>The fueling of nuclear activity in local radio galaxies: linking properties on macro and micro scales.</i>
10:00 - 10:05	Marco Laurenti	Flash Talk <i>Exploring the Accretion and Ejection Physics onto Highly Accreting SMBHs through X-ray Variability and Spectroscopy</i>
10:05 - 10:10	Stephen Molyneux	Flash Talk <i>The impact of quasars on the molecular ISM of their host galaxies across cosmic time</i>
10:10 - 10:40	Coffee Break	
10:40 - 11:05	Niel Brandt	Focus Talk <i>The Galactic Correlates of Long-Term Supermassive Black Hole Growth</i>
11:05 - 11:20	Yanlong Shi	Contributed Talk <i>Forming massive black holes during hierarchical star cluster formation</i>

11:20 - 11:35	Shoichiro Mizukoshi	Contributed Talk <i>Updated AGN Picture with Dusty/Dust-free Gas Structures and Effects of the Radiation Pressure</i>
11:35 - 12:35	discussion and concluding remarks	
12:35 - 12:45	final acknowledgments	