
Monday 28 August

9:00 - 9:15 Welcome

1- Baryonic physics or a more complex dark sector required to solve the CDM "small-scale crisis"?

9:15 - 9:35	Ostriker	Introduction
9:35 - 10:05	Pontzen	Baryonic redistribution of dark matter: where do we stand?
10:05 - 10:25	Lovell	The baryon-dark matter connection in galaxies
10:25 - 10:55		Coffee break
10:55 - 11:15	Maccio	NIHAO simulations: reconciling CDM and observations on small scales
11:15 - 11:45	Mayer	Core formation along with tidal stirring of dwarfs solve the too-big-to-fail problem and the morphology-density relation
11:45 - 11:55	<i>Fast talks</i>	Pawlowski, Rath, Trujillo-Gomez, Verbeke
11:55 - 12:25	Ostriker	Summary and discussion
12:25		Lunch

2- What is, and what is not understood about the time, timescale, sources and physics of reionization?

13:45 - 14:05	Dunlop	Introduction
14:05 - 14:35	Haehnelt	Probing reionization with Lyman-alpha in absorption and emission
14:35 - 15:05	Gnedin	Quest for galaxies that reionized the universe
15:05 - 15:35	Stark	Spectroscopy of Galaxies in the Reionization Era
15:35 - 16:05		Coffee break
16:05 - 16:25	Oesch	Galaxy Build-up at Cosmic Dawn: Hubble's Legacy into the JWST Era
16:25 - 16:45	Grazian	The contribution of faint AGN to the ionizing background at $z \sim 4$
16:45 - 16:55	<i>Fast talks</i>	Bunker, Eilers, Trebitsch
16:55 - 17:25	Dunlop	Summary and discussion

Tuesday 29 August

3 - What regulates the metabolism of star-forming galaxies through cosmic time?

9:00 - 9:20	Kravtsov	Introduction
9:20 - 9:50	Cresci	Galaxy-wide AGN driven outflows & feedback
9:50 - 10:20	Cantalupo	A 3D View of the Circumgalactic Medium in Fluorescent Ly-Alpha Emission
10:20 - 10:35	<i>Fast talks</i>	Buck, Concas, Liang, Matsuoka, Mingozi
10:35 - 11:05		Coffee break
11:05 - 11:35	Maiolino	New routes for galaxy transformation
11:35 - 11:55	Silverman	What physical conditions boost star formation well above the average in high-z galaxies?
11:55 - 12:10	<i>Fast talks</i>	Perna, Puglisi, Semenov, Suzuki, Talia
12:10 - 12:40	Kravtsov	Summary and discussion
12:40		Lunch

4 - Do the physics of star formation and metal enrichment evolve with cosmic epoch?

14:20 - 14:40	Shapley	Introduction
14:40 - 15:00	Pieri	New results in the measurement of weak distributed metal absorption in quasar spectra
15:00 - 15:20	Curti	The KLEVER Survey : Spatially resolved gas excitation properties and metallicity in high-z galaxies
15:20 - 15:40	Kobayashi	Cosmic chemical enrichment and AGN-driven metal-enhanced winds
15:40 - 16:10		Coffee break
16:10 - 16:30	Salvadori	Physics of star-formation and metal enrichment: a Local prospective
16:30 - 16:50	Erroz-Ferrer	The MUSE Atlas of Disks (MAD) survey: Dissecting local disks on <100 pc scales
16:50 - 17:05	<i>Fast talks</i>	Bonoli, Franco, Mingozi, Tasca, Venturi, Zoldan
17:05 - 17:35	Shapley	Summary and discussion

Challenges in Galaxy Evolution - Scientific Program

Wednesday	30 August	*at Cenacolo di Santa Croce
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5 - How and when do MBHs assemble and grow, and do they do so congruously with the stellar mass in galaxies?

8:45 - 9:05	King	Introduction
9:05 - 9:35	Volonteri	The early growth of black holes in galaxies
9:35 - 10:05	Greene	The Lifecycle of Black Holes: Seeds, Binaries, and Feedback
10:05 - 10:35	Lilly	The co-evolution of black-holes and galaxies
10:35 - 11:05	Mirabel	Stellar black holes at the dawn of the universe: a possible solution of the CDM "small-scale crisis"?
11:05 - 11:35		Coffee break
11:35 - 11:55	Fiacconi	Swift coalescence of supermassive black holes in cosmological mergers of massive galaxies
11:55 - 12:15	Aird	Tracking the distribution of AGN accretion across the evolving galaxy population
12:15 - 12:30	<i>Fast talks</i>	Bonfini, del Valle, Johnson, La Franca, Thater
12:30 - 13:00	King	Summary and discussion
13:00		Visit to Santa Croce

Thursday	31 August	
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6 - Do galaxy structural bimodality and quenching arise from the timing and physics of cosmological structure formation, or from baryonic physics, and do MBHs play any special role?

9:00 - 9:20	Renzini	Introduction
9:20 - 9:50	Combes	Respective quenching role of AGN feedback, morphology and environment
9:50 - 10:20	Giavalisco	The Evolution of Galaxies: Quenching and Structural Transformations
10:20 - 10:40	Feldmann	The link between cosmic structure growth and galaxy evolution in simulations
10:40 - 11:10		Coffee break
11:10 - 11:40	Cimatti	Lights and Shadows on the Evolution of Massive Galaxies
11:40 - 12:00	Huertas-Company	Investigating the link between quenching and bulge growth with artificial intelligence
12:00 - 12:20	Sokolowska	The key role of feedback in building hot galactic coronae and its impact on galactic bimodality
12:20 - 12:35	<i>Fast talks</i>	Bluck, Garratt-Smithson, Kuźmicz, Quai, Terrazas
12:35 - 13:05	Renzini	Discussion and conclusions
13:05		Lunch

7 - Are disks, bulges, and stellar halos really physically distinct components which form through different processes (how?) and at different epochs (when?)?

14:15 - 14:35	D'Onghia	Introduction
14:35 - 15:05	Fall	Angular Momentum and Sizes of Galaxies: Recent Developments
15:05 - 15:35	Bell	What drives the evolution of galaxies like the Milky Way?
15:35 - 16:05		Coffee break
16:05 - 16:35	Kassin	The Assembly of Disk Galaxies: From Keck to JWST
16:35 - 16:55	Pillepich	IllustrisTNG: the new frontier to understand the co-evolution of dark-matter and galaxies with cosmological simulations of structure formation
16:55 - 17:15	Lelli	The radial acceleration relation of galaxies
17:15 - 17:25	<i>Fast talks</i>	Costantin, Morselli, Peschken
17:25 - 17:55	D'Onghia	Discussion and conclusions

Friday	1 September	
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8 - Which specific "environment" has a role at each epoch in driving galaxy formation and evolution, and how?

9:00 - 9:20	Leauthaud	Introduction
9:20 - 9:50	Glazebrook	Massive galaxies vs time and environment and the population of red nuggets at z~4
9:50 - 10:20	Lake	Transformation in Clusters
10:20 - 10:40	Tozzi	The cycle of baryons in Brightest Cluster Galaxies
10:40 - 11:10		Coffee break
11:10 - 11:30	Henriques	Modelling the impact of environment on galaxy properties
11:30 - 11:50	Coogan	The molecular gas content of star-forming galaxies in a z~2 cluster as seen by JVLA and ALMA.
11:50 - 12:05	<i>Fast talks</i>	Alamo-Martinez, Garaldi, Hayashi, Santiago-Bautista, Walther, Yamaguchi
12:05 - 12:35	Leauthaud	Summary and discussion
12:35 - 13:05	Illingworth	Future perspectives
13:05		Lunch
