



Tracing Cosmic Evolution with Clusters of Galaxies

Sexten Center for Astrophysics - Conferences 2013

Sesto (BZ), Italy, 1-5 July 2013

Program

Legend of colors: **Review** - **Targeted** - Contributed talk

| Sunday, June 30 | | | |
|-----------------|-------|---------------------|---|
| 18:00 | 19:00 | | Registration at Haus Sexten |
| 20:30 | 22:00 | | Registration + welcome drink and concert at Haus Sexten |
| Monday, July 1 | | | |
| 8:30 | 9:00 | | Registration |
| 9:00 | 9:05 | | Welcome |
| | | | The Matter Distribution in Clusters |
| 9:05 | 9:40 | Tommaso Treu | Dark matter vs baryons: the inner regions of galaxy clusters |
| 9:40 | 10:05 | Andrea Biviano | On the dynamical equilibrium of clusters of galaxies - clues from kinematics |
| 10:05 | 10:20 | Madhura Killedar | Are the Einstein radii of galaxy clusters consistent with LCDM? |
| 10:20 | 10:45 | Gabriel Pratt | The X-ray/SZ view of galaxy clusters |
| 10:45 | 11:15 | | Coffee Break |
| 11:15 | 11:40 | Elena Rasia | X-ray analysis of simulated clusters |
| 11:40 | 11:55 | Megan Donahue | CLASH Cluster X-ray and Optical Mass Estimators |
| 11:55 | 12:10 | Claudio Grillo | Disentangling dark-matter profiles in CLASH galaxy clusters |
| 12:10 | 12:35 | Tesla Jeltema | Indirect detection of dark matter with Multiwavelength Observations of Clusters |
| 12:35 | 12:50 | Matteo Viel | New results on the coldness of cold dark matter |
| 12:50 | 14:20 | | Lunch Break |
| 14:20 | 14:55 | Keiichi Umetsu | Cluster Mass Distribution from Weak-Lensing Shear and Magnification |
| 14:55 | 15:10 | Elinor Medezinski | The extreme case of MACSJ0717 from recent CLASH lensing work |
| 15:10 | 15:25 | Marc Postman | The Cluster Dark Matter Concentration - Mass Relation from CLASH |
| 15:25 | 15:50 | James Jee | Cluster El Gordo: A Look from a Lensing Perspective |
| 15:50 | 16:20 | | Coffee Break |
| 16:20 | 16:55 | Anja von der Linden | How to weigh clusters of galaxies |
| 16:55 | 17:10 | Douglas Applegate | Weighing the Giants: Calibrating X-ray Mass Measurements with Accurate Weak Lensing |
| 17:10 | 17:35 | Massimo Meneghetti | Simulations and Lens Modeling Uncertainties |
| 17:35 | 17:50 | Emiliano Munari | The pseudo phase-space density profile of a rich, nearby galaxy cluster |
| 17:50 | 18:05 | Yu-Ying Zhang | Optical spectroscopy for galaxy clusters observed in X-ray surveys |

Tuesday, July 2

Cosmology and Large-scale Structure of the Universe

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| 9:00 | 9:35 | Jim Bartlett | Results from Planck |
| 9:35 | 9:50 | Suet Ying Mak | Constraints on Peculiar Velocities from Planck Data |
| 9:50 | 10:05 | Ines Flores-Cacho | Planck's view of the pressure profile of galaxy clusters |
| 10:05 | 10:20 | Alexis Finoguenov | X-ray galaxy groups in deepest X-ray surveys |
| 10:20 | 10:45 | Elena Pierpaoli | Cosmology with present and future surveys |
| 10:45 | 11:15 | <i>Coffee Break</i> | |
| 11:15 | 11:50 | Steve Allen | Cluster Cosmology |
| 11:50 | 12:05 | Barbara Sartoris | Constraining Dark Matter Equation of State with Galaxy Clusters |
| 12:05 | 12:20 | Yann Rasera | Imprints of dark energy and feedback on galaxy cluster formation |
| 12:20 | 12:35 | Marguerite Pierre | The XXL survey and its cosmological analysis |
| 12:35 | 12:50 | Teng Liu | The SWIFT X-ray Cluster Survey |
| 12:50 | 13:05 | Daniel Gettings | The Massive Distant Clusters of WISE Survey |
| 13:05 | 14:35 | <i>Lunch Break</i> | |
| 14:35 | 15:10 | Brad Benson | Sunyaev-Zel'dovich Cluster Surveys: Latest Results and Future Prospects |
| 15:10 | 15:35 | Mark Voit | Standards for Cluster Cosmology |
| 15:35 | 16:00 | Jean-Baptiste Melin | Cosmological constraints for Planck SZ cluster counts |
| 16:00 | 16:30 | <i>Coffee Break</i> | |
| 16:30 | 16:45 | Matt Hilton | Cosmology from ACT Sunyaev-Zel'dovich cluster counts after three observing seasons |
| 16:45 | 17:00 | Felipe Menanteau | The SZ cluster sample from the Atacama Cosmology Telescope |
| 17:00 | 17:15 | Gustavo Yepes | The MUSIC of galaxy Clusters: X-ray and SZ Scaling relations and the baryon content at different redshifts |
| 17:15 | 18:00 | <i>Poster Session 1</i> | <i>Poster Presentation Flash Talks</i> |

Wednesday, July 3

Cosmology and Large-scale Structure of the Universe

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| 9:00 | 9:35 | Yun Wang | Galaxy Clustering as a Cosmological Probe |
| 9:35 | 9:50 | Darren Reed | The challenge of an accurate cluster mass function from simulations |
| 9:50 | 10:05 | Kaustuv Basu | Revising the radio halo count in the sky: A new cosmic signpost? |
| 10:05 | 10:20 | Roberto Scaramella | Euclid Survey(s) |
| 10:20 | 10:50 | <i>Coffee Break</i> | |
| <u>The Cycle of Baryons and Galaxy Populations in Clusters</u> | | | |
| 10:50 | 11:25 | Daisuke Nagai | Cosmological Simulations of Galaxy Clusters: Recent Advances & Future Challenges |
| 11:25 | 11:50 | Klaus Dolag | A pathfinder simulation as counterpart for multi-wavelength surveys |
| 11:50 | 12:05 | Susana Planelles | Understanding the physics of the intra-cluster gas by means of hydrodynamical simulations of galaxy clusters |
| 12:05 | 12:20 | Britton Smith | Thermal Conduction in the Cores and Outskirts of Galaxy Clusters |
| 12:20 | 12:45 | Bill Forman | Supermassive Black Holes and their Effects on the Evolution of Central Galaxies in Groups and Clusters |
| 12:45 | 13:00 | Ming Sun | Multiphase gas and young stars in the stripped tails of cluster galaxies and in the group cool cores |
| 13:00 | <i>Lunch Break</i> | | |
| FREE AFTERNOON + SOCIAL DINNER (20:30) | | | |

Thursday, July 4

The Cycle of Baryons and Galaxy Populations in Clusters

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|-------|-------|---------------------|---|
| 9:00 | 9:35 | Simona Mei | Galaxy evolution in clusters |
| 9:35 | 10:00 | Gus Evrard | Baryons in Massive Halos: The Resurgence of Galaxies and Challenges Ahead |
| 10:00 | 10:15 | Grant Tremblay | New results on star formation, cold molecular gas, and mechanical AGN feedback in Cool Core BCGs |
| 10:15 | 10:30 | Alvaro Villalobos | Simulating galaxy evolution in groups |
| 10:30 | 10:45 | Yara Jaffe | The effect of environment on star formation and gas reservoirs with BUDHIES |
| 10:45 | 11:15 | | <i>Coffee Break</i> |
| 11:15 | 11:50 | Yen-Ting Lin | Cold baryons in clusters: galaxy populations and brightest cluster galaxies |
| 11:50 | 12:15 | Anthony Gonzales | Galaxy Clusters During the Era of Cluster Formation |
| 12:15 | 12:30 | Veronica Strazzullo | Galaxy populations in very distant clusters: a study in Cl J1449+0856 at $z=2$ |
| 12:30 | 12:45 | Raphael Gobat | The first cluster(s) and the galaxy population at $z\sim 2$ |
| 12:45 | 13:00 | Mauro Giavalisco | The evolution of massive compact galaxies and its dependence on the environment |
| 13:00 | 14:30 | | <i>Lunch Break</i> |
| 14:30 | 14:45 | Tadayuki Kodama | The progenitors of cluster early-type galaxies under rapid construction at $z\sim 2$ |
| 14:45 | 15:00 | Julie Nantais | Downsizing and Settling Down between $z = 0.8$ and $z = 1.2$ |
| 15:00 | 15:15 | Rene Fassbender | X-ray cluster and galaxy population properties up to redshift $z\sim 1.6$ |
| 15:15 | 15:30 | Joana Santos | Dust-obscured star-formation in the outskirts of XMMU J2235.3-2557, a massive galaxy cluster at $z=1.4$ |
| 15:30 | 15:45 | Tracy Webb | The Evolution of Dusty Star formation in Clusters to $z = 1$: Spitzer IR Observations of the First Red-Sequence Cluster Survey |
| 15:45 | 16:15 | | <i>Coffee Break</i> |
| 16:15 | 16:30 | Remco van der Burg | The cluster galaxy stellar mass function at $z \sim 1$ |
| 16:30 | 16:45 | Sabrina De Grandi | On the Formation of Metal Abundance Peaks in Cool-Core Clusters: Hints from Cluster WARPJ1415.1+3612 at $z=1.03$ |
| 16:45 | 17:00 | Dominika Wylezalek | Galaxy clusters around radio-loud AGN at 1.3 |
| 17:00 | 17:15 | Elena Tundo | Galaxy evolution with the Swift X-ray Telescope Cluster survey |
| 17:15 | 17:30 | Malcolm Bremer | Protoclusters at $z\sim 5$ |
| 17:30 | 18:00 | Poster Session 2 | Poster Presentation Flash Talks |

Friday, July 5

The Cycle of Baryons and Galaxy Populations in Clusters

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| 9:00 | 9:25 | Stefano Ettori | From X-ray observables to M_{tot} in galaxy clusters: biases and results |
| 9:25 | 9:40 | Silvano Molendi | Combining X-ray and SZ observations to characterize cluster outskirts: current work and future prospects |
| 9:40 | 9:55 | Aurora Simionescu | The 99% perspiration and 1% inspiration of cluster outskirts research |
| 9:55 | 10:10 | Michael McDonald | The Evolution of Cool Cores and ICM Cooling from $z=0$ to $z=1.2$ |
| 10:10 | 10:25 | Stefano Andreon | The enrichment history of the intracluster medium in the last 8 Gyr |
| 10:25 | 10:55 | | <i>Coffee Break</i> |
| 10:55 | 11:20 | Bianca Poggianti | Galaxy populations in and out of clusters |
| 11:20 | 11:35 | Alessandro Rettura | Evolution in the Structural Properties of Early-Type Brightest Cluster Galaxies over the past 10 billion years |
| 11:35 | 11:50 | M. Huertas-Company | Tell me where you live and I'll tell you how big you are |
| 11:50 | 12:05 | Amata Mercurio | Characterising galaxy population evolution at intermediate redshift: the cluster MACSJ1206 |
| 12:05 | 12:20 | Gregory Rudnick | A Tale of Dwarfs and Giants: Using a $z = 1.62$ Cluster to Understand How the Red Sequence Grew Over The Last 10 Gyr |
| 12:20 | 12:35 | Adam Muzzin | Environmentally-Driven Galaxy Evolution at $z \sim 1$: The Perspective from Rich Galaxy Clusters |
| 12:35 | 12:50 | Dennis Zaritsky | Results from the MENeCS Survey |
| 12:50 | 14:20 | | <i>Lunch Break</i> |
| 14:20 | 14:45 | Ann Zabludoff | Deficit Spending and the Cluster Baryon Budget |
| 14:45 | 15:00 | Jorge Melnick | Intergalactic stellar populations in intermediate redshift clusters |
| 15:00 | 15:15 | Valentina Presotto | Baryons in CLASH BCGs: from ICL to inner dynamics |
| 15:15 | 15:30 | Gastao Lima Neto | The baryon content in groups and clusters of galaxies |
| 15:30 | 16:00 | Colin Norman | SUMMARY TALK |