

# Galaxy Clusters as Giant Cosmic Laboratories – Programme

Monday, 21 May 2012

09:00	Registration
09:50	<i>Schartel</i> : Opening Remarks
<b>Session I</b> Chair: <b>Birzan</b>	<b>Dynamical and Thermal Structure of Galaxy Clusters and their ICM</b>
10:00	<i>Sanders</i> : The thermal and dynamical state of cluster cores
10:30	<i>Ohashi</i> : X-ray study of clusters at the outer edge and beyond
10:45	<i>Eckert</i> : The gas distribution in galaxy cluster outer regions
11:00	<i>Molendi</i> : Extending measures of the ICM to the outskirts: facts, myths and puzzles
11:15	<i>Sato</i> : Temperature, entropy, and mass profiles to the virial radius of galaxy clusters with Suzaku
11:30-12:00	Coffee Break & Poster Viewing
<b>Session II</b> Chair: <b>Altieri</b>	<b>Dynamical and Thermal Structure of Galaxy Clusters and their ICM</b>
	<b>Cluster Mass Determination</b>
12:00	<i>Ettori</i> : Cluster mass profiles from X-ray observations: present constraints and limitations
12:30	<i>Russell</i> : Shock fronts, electron-ion equilibration and ICM transport processes in the merging cluster Abell 2146
12:45	<i>ZuHone</i> : Probing the Microphysics of the Intracluster Medium with Cold Fronts in the ICM
13:00	<i>Rossetti</i> : Challenging the merging/sloshing cold front paradigm with a new XMM observation of A2142
13:15	<i>Nevalainen</i> : Bulk motion measurements in clusters of galaxies using XMM-Newton and ATHENA
13:30-15:00	Lunch
<b>Session III</b> Chair: <b>de Grandi</b>	<b>Dynamical and Thermal Structure of Galaxy Clusters and their ICM</b>
	<b>Cluster Mass Determination</b>
15:00	<i>Mahdavi</i> : Multiwavelength Constraints on Scaling Relations and Substructure in a Sample of 50 Clusters of Galaxies
15:30	<i>Pratt</i> : Galaxy cluster mass profiles
15:45	<i>Biffi</i> : Observing simulated galaxy clusters: the prospects of velocity diagnostics of the ICM
16:00	<i>Bogdan</i> : Exploring the dynamics of A194
16:15	<i>Lyskova</i> : A simple recipe for estimating masses of elliptical galaxies and clusters of galaxies
16:30-17:00	Coffee Break & Poster Viewing
<b>Session IV</b> Chair: <b>Viana</b>	<b>Cluster Mass Determination</b>
	<b>Cluster Scaling Relation with Emphasis on X-rays</b>
17:00	<i>Hoekstra</i> : Cluster masses from weak lensing measurements
17:30	<i>Maughan</i> : The X-ray Scaling Properties of Galaxy Clusters
18:00	<i>Aguerri</i> : Fossil Groups Origins (FOGO) project: X-ray scaling relations of fossil systems
18:15	<i>Lovisari</i> : Scaling relations with a complete sample of galaxy groups
18:30	End of Session

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Tuesday, 22 May 2012

<b>Session V</b>		<b>AGN Feedback in Clusters</b>
<b>Chair: Durret</b>		
09:00	<i>McNamara</i> : AGN Feedback in Clusters	
09:30	<i>Nulsen</i> : AGN feedback in clusters: the feedback cycle	
10:00	<i>Voit</i> : Triggering of AGN Feedback	
10:15	<i>Soker</i> : The cold feedback mechanism	
10:30	<i>Planelles</i> : On the role of AGN feedback on the baryon content of galaxy clusters	
10:45	<i>Hilton</i> : Evolution of the X-ray luminosity-temperature relation from the XCS first data release	
11:00-11:30	Coffee Break & Poster Viewing	
<b>Session VI</b>		<b>AGN Feedback in Clusters</b>
<b>Chair: Pedersen</b>		
11:30	<i>Edge</i> : The Herschel view of clusters of galaxies	
12:00	<i>Hardcastle</i> : The environmental impact of powerful radio galaxies in groups and clusters	
12:15	<i>Birzan</i> : The Duty Cycle of Radio Mode Feedback	
12:30	<i>Gaspari</i> : Solving the Cooling Flow Problem through Mechanical AGN Feedback	
12:45	<i>Pike</i> : The Influence of Cooling and Feedback on Cluster Pressure Profiles	
13:00	<i>Randall</i> : Initial Results from a Very Deep Chandra Observation of the Galaxy Group NGC 5813	
13:15	<i>Killedar</i> : The Role of AGN Feedback in Strong Lensing Predictions	
13:30-15:00	Lunch	
<b>Session VII</b>		<b>Chemical Composition of the ICM</b>
<b>Chair: Kaastra</b>		
15:00	<i>Matsushita</i> : Metals in clusters of galaxies observed with Suzaku and XMM-Newton	
15:30	<i>de Plaa</i> : The origin of the chemical elements in cluster cores	
16:00	<i>Ueda</i> : X-ray Measurement of the Elemental Abundance at the Outskirts of the Perseus Cluster with Suzaku	
16:15	<i>Ghizzardi</i> : Metal jumps across sloshing cold fronts: the case of A496	
16:30-17:00	Coffee Break & Poster Viewing	
<b>Session VIII</b>		<b>Comparison of X-ray, SZE and Optical Observations of Clusters</b> <b>The Evolution of the Cluster Population with Redshift</b>
<b>Chair: Ponman</b>		
17:00	<i>Pointecouteau</i> : Galaxy cluster detections in the PLANCK Survey	
17:30	<i>Ineson</i> : Radio loud AGN: is there a link between luminosity and cluster environment?	
17:45	<i>Jones</i> : Mergers and AGN Outbursts in Planck SZ and X-ray Selected Cluster Samples	
18:00	<i>Sembolini</i> : The Evolution of the Y-M scaling relation in MUSIC clusters	
18:15	<i>Giodini</i> : The smaller the better: X-ray groups as cosmic laboratories	
18:30	End of Session	
21:00	Conference Dinner	

## Galaxy Clusters as Giant Cosmic Laboratories – Programme

Wednesday, 23 May 2012

<b>Session IX</b>		<b><u>Comparison of X-ray, SZE and Optical Observations of Clusters</u></b>
<b>Chair: Yepes</b>		<b><u>The Evolution of the Cluster Population with Redshift</u></b>
09:00	<i>Rozo</i> : A Fully Self-Consistent Picture of Galaxy Cluster Abundances and Optical, X-ray, and SZ Scaling Relations at $z=0.2$	
09:30	<i>Mohr</i> : X-ray and Optical Observations of High Redshift SPT Selected Galaxy Clusters	
10:00	<i>Takey</i> : The 2XMMi/SDSS Galaxy Cluster Survey	
10:15	<i>Mroczkowski</i> : A Comparison of X-ray, Radio, and Lensing Results with GBT+MUSTANG Observations of the Sunyaev-Zel'dovich Effect	
10:30	<i>Flores-Cacho</i> : Detection and characterisation of the first Planck high- $z$ candidates	
10:45	<i>Owers</i> : Galaxy Transformation in the Major merger Abell 2744	
11:00-11:30	Coffee Break & Poster Viewing	
<b>Session X</b>		<b><u>The Evolution of the Cluster Population with Redshift</u></b>
<b>Chair: Forman</b>		<b><u>Galaxy Clusters as Cosmological Probes</u></b>
11:30	<i>Zheng</i> : Probing High-Redshift Galaxies through Cluster Lensing	
11:45	<i>Kay</i> : Sunyaev-Zel'dovich Clusters in Millennium Gas Simulations	
12:00	<i>Borgani</i> : Simulations to calibrate clusters for cosmology	
12:30	<i>Santos</i> : Deep Chandra observation of the galaxy cluster WARPJ1415.1+3612 at $z=1$ : An evolved cool-core cluster at high redshift	
12:45	<i>Viana</i> : XCS: present status and latest results	
13:00	<i>Pérez-Martínez</i> : CL0024 as seen by the Galaxy Cluster Evolution survey (GLACE)	
13:15	<i>de Hoon</i> : Distant Galaxy Clusters in a Deep XMM-Newton Observation	
13:30-15:00	Lunch	
<b>Session XI</b>		<b><u>The Evolution of the Cluster Population with Redshift</u></b>
<b>Chair: Longinotti</b>		<b><u>Galaxy Clusters as Cosmological Probes</u></b>
15:00	<i>Dolag</i> : Comparison of Observations and Simulations of galaxy clusters	
15:30	<i>Röttgering</i> : LOFAR surveys of the radio sky: probing shocks and magnetic fields in galaxy clusters	
16:00	<i>Gu</i> : Search for Galaxy-ICM Interaction in Rich Clusters of Galaxies	
16:15-16:45	Coffee Break & Poster Viewing	
<b>Session XII</b>		<b><u>Non-thermal processes in clusters</u></b>
<b>Chair: Stuhlinger</b>		
16:45	<i>Kale</i> : Discovery of the first radio halo in a new Planck cluster confirmed by XMM Newton	
17:00	<i>Sarazin</i> : X-ray Observations of Shocks and Radio Emission in Abell 3667, Abell 665, Abell 2061, and the Cygnus-A Cluster	
17:15	<i>Ogrian</i> : CIZA J2242.8+5301: The galaxy cluster with the strongest merger shock	
17:30	Closing Remarks	
17:45	End of Meeting	