

IPMU/DENET International Conference  
*CL J2010: from massive galaxy formation to dark energy*

## program

(June 25)

6/27 (Sun)		
18:00-19:00	Reception at Crest Hotel	
6/28 (Mon)		
09:00-09:30	registration/light breakfast/poster setup	
09:30-09:40	announcement/logistics	
09:40-09:50	Hitoshi Murayama	Welcome
opening review		
09:50-10:20	August Evrard	When clusters merge with massive halos
BCGs (I)		
10:20-10:50	Gabriella De Lucia	The formation of galaxy clusters and of their brightest galaxies in hierarchical models
10:50-11:10	Kevin Bundy	Observational probes of the assembly history of massive halos
11:10-11:40	break/poster setup	
11:40-12:00	Eiichi Egami	Spitzer infrared observations of the brightest cluster galaxies
cluster cosmology (I)		
12:00-12:30	William Holzapfel	Cluster Cosmology with the South Pole Telescope
12:30-14:00	lunch	
14:00-14:20	Stefano Ettori	Cosmological constraints from estimates of the gas mass, total mass and concentration parameter in X-ray luminous galaxy clusters
ICM (I)		
14:20-14:50	Eiichiro Komatsu	WMAP 7-year results: Sunyaev-Zel'dovich effect
14:50-15:20	poster presentation	

15:20-16:10	break @ IPMU	
16:10-16:40	Tetsu Kitayama	Multi-wavelength studies of substructures and inhomogeneities in galaxy clusters
16:40-17:00	Kyoko Matsushita	Metal abundances in the Intracluster medium observed with XMM and Suzaku
<b>6/29 (Tue)</b>		
09:00-09:20	registration/light breakfast	
BCG (II)		
09:20-09:50	James Bullock	The hierarchical assembly of galaxy clusters and intra-cluster light
09:50-10:20	Anthony Gonzalez	Coevolution of brightest cluster galaxies and intracluster light
10:20-10:40	Sarah Hansen	Galaxy populations and intracluster light in local Universe clusters
10:40-11:20	break	
lensing (I)		
11:20-11:50	Henk Hoekstra	Weak lensing studies of clusters of galaxies
11:50-12:20	Tomaso Treu	Measuring the invisible with gravitational lensing: dark matter and the highest redshift galaxies
12:20-14:00	lunch	
12:35-13:45	lunch session: how much do we understand ICM?	
	Brian Mason	New high resolution SZ measurements with MUSTANG on the GBT
	Jesper Rasmussen	Witnessing the formation of a brightest cluster galaxy
	Kaustuv Basu	SZ/X-ray Joint Analysis of the Intra-Cluster Medium using APEX-SZ Data
	Madoka Kawaharada	Joint X-ray, lensing and optical study of Abell 1689: anisotropic gas temperature and entropy distributions associated with the large-scale structure
	Pasquale Mazzotta	How much do we understand ICM?
14:00-14:20	Alexie Leauthaud	Weak lensing in COSMOS: the halo masses of groups and clusters of galaxies

cluster galaxy evolution (I)		
14:20-14:50	Bianca Poggianti	The build-up of galaxy populations over cosmic time and across environments
14:50-15:10	Graham Smith	LoCuSS - a multi-wavelength survey of galaxy clusters
15:10-15:50	break	
15:50-16:10	David Wilman	The origin of the morphology-density relation
16:10-16:30	Roderik Overzier	The life cycle of massive cluster galaxies from the early Universe to the present
high-z clusters (I)		
16:30-16:50	Casey Papovich	The search for distant galaxy clusters selected from galaxy overdensities
16:50-17:10	Piero Rosati	The baryonic and dark matter content of the most distant clusters
6/30 (Wed)		
09:00-09:20	registration/light breakfast	
cluster cosmology (II)		
09:20-09:50	Hans Boehringer	Studying galaxy clusters for precision cosmology applications
09:50-10:10	Neelima Sehgal	$\sigma_8$ from Sunyaev-Zel'dovich galaxy clusters detected with the Atacama Cosmology Telescope
10:10-10:30	Michael Gladders	The statistics of cluster- and group-scale strong lensing in the SDSS and RCS2
10:30-11:10	break	
11:10-11:40	Masamune Oguri	The shape of massive dark matter halos from gravitational lensing
11:40-12:00	Eduardo Rozo	Precision cosmology with optical clusters: current constraints and future prospects
ICM (II)		
12:00-12:30	Daisuke Nagai	Impact of Cluster Physics on the Sunyaev-Zel'dovich Power Spectrum
12:30-14:00	lunch; poster change	
12:45-13:45	lunch session: measuring cluster mass	

	Nobuhiro Okabe	LoCuSS: Subaru weak lensing study of galaxy clusters
	Anja von der Linden	Weighing the giants: X-ray and weak lensing studies of the most massive clusters
	Rene Fassbender	Cluster assembly, mass estimates, and merger physics from an X-ray-optical-SZE-lensing-radio study of the amazing galaxy cluster XMMU J1230.3+1339 at $z \sim 1$
	Maria Pereira	LoCuSS: dynamical mass estimates and substructure in a large sample of clusters with Hectospec/MMT
14:00-14:30	Stefano Borgani	Astrophysics and cosmology with clusters: a simulator's perspective
lensing (II)		
14:30-15:00	Takashi Hamana	Searching for clusters with weak lensing and HSC survey
15:00-15:20	Massimo Meneghetti	Weighing simulated galaxy clusters using lensing and X-ray
15:20-16:00	break	
16:00-16:20	Johan Richard	Evolution of cluster scaling relations as seen with strong lensing
16:20-17:10	discussion (I): cluster cosmology and future surveys	
19:00-21:00	Banquet at Crest Hotel	
<b>7/1 (Thu)</b>		
09:00-09:10	registration/light breakfast	
a CMB perspective		
09:10-09:40	Sudeep Das	The CMB as a backlight
high-z clusters (II)		
09:40-10:00	Masayuki Tanaka	The environmental dependence of galaxy properties at $z > 1.5$
10:00-10:20	Mark Brodwin	Properties of LIRGs and ULIRGs in ISCS galaxy clusters at $1 < z < 1.5$
10:20-10:40	break	
galaxy-ICM interactions		

10:40-11:10	Paul Martini	The evolution of AGN in groups and clusters of galaxies
11:10-11:30	Ian McCarthy	The case for AGN feedback in galaxy groups
11:30-11:50	Yutaka Fujita	High metallicity of the X-ray gas up to the virial radius of a binary cluster of galaxies: evidence of galactic superwinds at high-redshift
11:50-12:10	break	
12:10-12:30	David Sand	The cluster supernova rate at $z \sim 0.1$ : hostless supernovae, enrichment of the intracluster medium and the environmental dependence of the SNIa rate
12:30-12:50	Lori Lubin	The active galaxy population in a high-redshift supercluster
<b>7/2 (Fri)</b>		
09:00-09:20	light breakfast	
cluster galaxy evolution (II)		
09:20-09:50	Tadayuki Kodama	Panoramic views of cluster evolution with Subaru
09:50-10:10	Adam Muzzin	The Gemini cluster astrophysics spectroscopic survey
issues with cluster surveys		
10:10-10:40	Gilbert Holder	The physics and astrophysics of SZ surveys
10:40-11:10	break	
11:10-11:50	James Gunn	Conference Highlight
11:50-12:10	William High	Efficient optical follow-up to the first 21 galaxy clusters selected from the Sunyaev-Zeldovich effect by the South Pole Telescope
12:10-12:30	Felipe Menanteau	Massive SZ-clusters discovered with the Atacama Cosmology Telescope
12:30-14:00	lunch	
12:45-13:45	lunch session: cluster galaxy evolution across cosmic time	
	Yusei Koyama	Hidden star formation activity around distant clusters at $z \sim 1$
	Renbin Yan	RCS-SPEC: galaxy evolution in distant clusters

	Michael Hudson	The star formation histories of cluster red-sequence galaxies
	Tiziano Valentiniuzzi	Massive compact galaxies in local and high-z galaxy clusters
14:00-14:20	Keiichi Umetsu	AMiBA Sunyaev-Zel'dovich effect and multiwavelength study of galaxy clusters
14:20-14:40	Douglas Rudd	Non-equilibrium electrons and the SZ effect at large radius
14:50-15:40	discussion (II): massive galaxy formation (@IPMU)	
15:40-	break@IPMU	

# Logistic information

## (1) wireless connection

Please see the attached sheet for wireless connection at Kashiwa Library and at IPMU.

## (2) travel info

We have made a document that provide useful information for

- going from Narita airport to Kashiwa
- taking buses to go between Kashiwa and IPMU
- going from IPMU to Tokyo
- going to Narita airport from IPMU/Kashiwa

Please take a look at it.

As there is no activity scheduled on Thursday (7/1) afternoon, we expect some people may want to explore Tokyo; the guide tells you how to get to Tokyo. For those who would like to stay at IPMU and work in that afternoon, we have rooms available. We will also provide shuttle (see below) to take you back to Kashiwa.

## (3) shuttle schedule

For those who will stay in Kashiwa, we will provide shuttle between Kashiwa and IPMU. (If you stay at other places, take a look at the travel guide mentioned above, which will tell you how to get to IPMU.)

In the morning, two buses will leave from Crest hotel, one from Mitsui Garden hotel. Those who stay in Plaza Hotel and Annex can walk to the Crest hotel and take the buses. The time that buses leave Kashiwa is

6/28 Hotels 8:20 -> Kashiwa Library 9:00  
6/29 Hotels 8:20 -> Kashiwa Library 9:00  
6/30 Hotels 8:20 -> Kashiwa Library 9:00  
7/01 Hotels 8:20 -> Kashiwa Library 8:50  
7/02 Hotels 8:30 -> Kashiwa Library 9:00

The schedule for buses returning to Kashiwa is

6/28 Kashiwa Library 17:30 -> Hotels 18:00  
6/29 Kashiwa Library 17:40 -> Hotels 18:10  
6/30 Kashiwa Library 18:00 -> Hotels 18:30  
7/01 Kashiwa Library 13:40 (1 bus) -> Kashiwa Station 14:10  
Kashiwa Library 13:40 (1 bus) -> Kashiwanoha campus Station 13:50  
Kashiwa Library 17:00 (1 bus) -> Hotels 17:30  
7/02 Kashiwa Library 16:30 (1 bus) -> Hotels 17:00  
Kashiwa Library 17:00 (2 buses) -> Hotels 17:30

#### (4) light breakfast and afternoon tea

Every morning we will provide light breakfast and coffee. In the afternoon breaks snacks and drinks will also be provided. The afternoon breaks on Monday and Friday will take place at IPMU at 3F.

#### (5) posters

If you will present a poster, please check the order of the poster display in a separate sheet. The first number (1/2) indicates the period (first half or second half) your poster will be displayed in the conference. The order was determined in random. The second number is the number of the poster in the respective periods. The poster switch occurs on Wednesday at noon.

17 people will show their posters in the machine gun session on Monday. Each one has 90sec.

#### (6) banquet

The banquet will be held in Crest hotel (Crest room, 4F) on Wednesday (6/30) from 7-9pm. We will have 3 buses going to Crest hotel after the Wednesday sessions. It will be of buffet style.

#### (7) lunch sessions

The three lunch sessions will take place in Seminar room A and B, IPMU. 60 lunch boxes will be provided. We will distribute the lunch boxes according to the order of the doodle poll.

#### (8) discussion sessions

session I: cosmology and future cluster surveys

moderator: Gus Evrard

panelists: Hans Boehringer, Mike Gladders, Henk Hoekstra, Gil Holder, Eiichiro Komatsu, Masahiro Takada

session II: formation of massive galaxies

moderator: James Bullock

panelists: Kevin Bundy, Gabriella De Lucia, Anthony Gonzalez, Taddy Kodama, Bianca Poggianti, Tommaso Treu

The panelists will prepare slides and lead the discussion. We hope everyone can actively participate in the sessions!