

Joint Discussion 07

THE UNIVERSE AT $Z>6$

Thursday August 17, 14:00 through Friday August 18, 17:30

Organized by Division VIII, Participating Commissions: 28 & 47

Scientific Organizing Committee: Andrea Ferrara (Italia, co-Chair), Esther M. Hu (USA), Matthew D. Lehnert (Germany), Roser Pelló (France), Daniel Schaerer (Switzerland, co-Chair), and Yoshiaki Taniguchi (Japan)

Editors of Proceedings: Daniel Schaerer, Andrea Ferrara

Thursday August 17

Session I. Lyman break galaxies, Lyman-alpha emitters and related objects

Chair, D. Schaerer

14:00	Lyman break galaxies at $z>6$	<i>(Invited)</i> R. Bouwens
14:30	Subaru observations of the high- z universe	<i>(Invited)</i> Y. Taniguchi
15:00	Galaxies in the first billion years: implications for reionization and the star formation history at $z>6$	A. Bunker
15:20	A Spitzer/IRS search for the galaxies that reionized the universe	M. Lacy
15:35	<i>Coffee</i>	
16:00	High- z lensed galaxies	<i>(Invited)</i> R. Pelló
16:30	New constraints on the comoving star formation rate in the redshift interval $6<z<10$	R. Ellis
16:50	Observations of galaxies at $z>6$ - the properties of large, spectroscopic samples	E. Hu
17:10	The properties of faint Lyman-alpha emitters at $z\sim 6$: results	C. Martin
17:30	<i>Closing</i>	

Friday August 18

**Session I. Lyman break galaxies, Lyman-alpha emitters and related objects
(cont.)**

Chair, E. Hu

- 09:00 High-redshift Lyman-alpha galaxies (Invited) S. Malhotra
09:35 An observational pursuit for Population III stars T. Nagao
in a Lyman-alpha emitter at $z > 6$ through He II Emission
09:55 The end of the reionization epoch probed by NK. Kashikawa
Lyman-alpha emitters at $z=6.5$

Session II. High-z AGN and reionisation

- 10:15 Metallicity and black hole masses of $z \sim 6$ QSOs J.D. Kurk
10:30 Coffee
11:00 Populations of candidate black holes at redshift 7 or above A.Koekemoer
11:20 Constraining the reionization history with QSO S.Gallerani
absorption spectra
11:40 Size of HII regions around high redshift Quasars A.Maselli
vs intergalactic medium neutral hydrogen fraction at $z \sim 6$

Session III. Dust and GRB at high-z

- 12:00 Dust at high-z: observations and theory (Invited) R. Maiolino
12:35 Lunch

Chair, A.Ferrara

- 14:00 Studying the first galaxies at centimeter and millimeter C.Carilli
wavelengths

14:20 Spectroscopy of the near infrared afterglow of GRB 050904 at $z=6.3$ N. Kawai

14:35 Implications for the cosmic reionization from the optical afterglow spectrum of the Gamma-Ray Burst 050904 at $z = 6.3$ T.Totani

Session IV. Background radiation, reionisation, and modeling

14:55 Cosmic Microwave Background: probing the universe from $z=6$ -1100 (Invited) D.N. Spergel

15:30 *Coffee*

16:00 *Observational Constraints on Very Faint, High- z , Quasars M. Dijkstra

16:20 The first galaxy signatures in the infrared background, cosmic microwave background, and the 21-cm background A.Cooray

16:35 Additional sources of ionization in early universe and 21 cm line E. Vasiliev

16:50 Assessing the influence of metallicity on the fragmentation of protogalactic gas A.-K. Jappsen

17:10 UV radiative feedback on high-redshift proto-galaxies A. Mesinger

17:30 *Closing*

* *Late program change (5 aug, 2006)*

POSTERS

0925 A. T. Bajkova

A High-Accuracy Method for the Removal of Point Sources from Maps of the Cosmic Microwave Background

0641 L. N. de Silva

A Universe With Both Deceleration And Acceleration

1557 G Liu

CMB quadrupole induced polarisation from large scale structure.

1400 A. Verhamme

Modeling $z \sim 3$ Ly-alpha spectra to gain insight into high redshift Ly-alpha emitters

1536 A. Hempel

News from $z \sim 6-10$ galaxy candidates found behind gravitational lensing clusters

1499 G.R. Burbidge

Nucleosynthesis without a beginning

0147 Sohrab Rahvar

Observational test on a generalized theory of Gravity

1954 K Ichiki

Probing Weakest Extragalactic Magnetic Fields with Gamma-ray Bursts

1987 S Frey

SDSS J0836+0054: a radio quasar at $z \sim 6$ with a resolution of 40 pc

0391 LM Riofrio

Space/Time, Supernovae, And The Faint Young Sun

0126 A. B. Morcos

Stability and Formation of Cluster of Galaxies, Galaxies, Clusters of Stars and Stars in Some Cosmological Models

1528 F. Walter

Studying the first galaxies at centimeter and millimeter wavelengths

0366 Y. P. Wang

Subaru deep imaging of the field of QSO 1508+5714 at $z=4.28$

1587 L. Chuzhoy

The 21-cm Signature Of The Early Radiation Sources

1634 Jiri Krticka

The mass loss from hot Pop III stars

1325 E. M. de Gouveia Dal Pino

The spectrum of primordial gravitational waves