

Star and Structure Formation: From First Light to the Milky Way
 Astrophysics Conference, August 18 – 22, 2003, ETH Zurich, Switzerland

Program (per August 12, 2003)

The Conference will take place at ETH Center, Main Building, Audi Max, F30

Sunday August 17, 2003

Time	
16:00 - 20:00	Registration * (ETH Center, Main Building, in the Main Hall)
18:00 - 20:00	Welcome Reception (ETH Center, Main Building, Dozentenfoyer, J-Floor)

Monday morning, August 18, 2003

1. When and where was First Light and how can we look for it?

Time		
08:30	M. Carollo	Opening of the Conference
	O. Kübler ETH President	Welcoming Address
Min.	Speaker	Title
08:45	50 M. Rees	Introduction to Conference and Session
09:35	20 A. Loeb	Probing the First Stars and their Effects on the Universe
09:55	20 M. Shull	First Stars and Quasars: What are their Effects on the IGM?
10:15	10 V. Bromm	The End of the Dark Ages: The Formation of the First Stars and Quasars
10:25	20 A. Ferrara	Feedback Effects at Cosmic Dawn
10:45	15	Questions and Discussion
11:00	30	Coffee Break
11:30	20 T. Abel	The First Sources of Light
11:50	10 S. Malhotra	First Light - have we found it in Lyman-alpha emitters?
12:00	20 L. Cowie	High z galaxies and AGN
12:20	30	Questions and Discussion

* Late Registration on Monday 08:00 – 12:00.
 Then daily from 08:00 – 09:00 in the Conference office, Main Building, F 33.5

Monday afternoon, August 18, 2003

2. When did Reionization occur and what did it?

Time	Min.	Speaker	Title
14:30	30	Z. Haiman	Introduction to Session
15:00	20	R. Barkana	GRBs versus Quasars: Lyman-alpha Signatures of Reionization versus Cosmological Infall
15:20	10	J. Rhoads	Probing Reionization History with Topological Tests
15:30	20	J. Miralda-Escude	The First Stars and Reionization
15:50	15	Questions and Discussion	
16:05	30	Coffee Break	
16:35	20	X. Fan	Highest-redshift Quasars: Probing the End of the Reionization Epoch
16:55	10	C. Maier	Constraints to the Evolution of Ly-alpha bright Galaxies between $z = 3$ and $z = 6$
17:05	10	C. Martin	The Space Density of Redshift 5.7 LyA Emitters from a Deep, Keck Multislit Windows Search
17:15	10	M. Bremer	Constraints on Reionization from High-z Galaxies
17:25	20	E. Hu	Observational Constraints on Reionization from High-z Galaxy Studies
17:45	30	Questions and Discussion	

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Tuesday morning, August 19, 2003

3. How does Metallicity of the Universe develop?

Time	Min.	Speaker	Title
08:30	30	R. Kennicutt	Introduction to Session
09:00	20	J. Truran	Evolution of the Metallicity of the Universe
09:20	20	L. Greggio	On the constraints on galaxy formation timescales from observed alpha elements overabundance
09:40	10	A. Ferguson	Constraints on Galaxy Formation from Observations of Resolved Fossils
09:50	10	M. Cappellari	The Fossil Record of Galaxy Formation observed with SAURON
10:00	20	C. Chiosi	Chemical Evolution of the ICM
10:20	15	Questions and Discussion	
10:35	25	Coffee Break	
11:00	20	D. Koo	New Explorations with DEEP of the Metallicities of Gas and Stars at intermediate Redshifts
11:20	10	J. Schaye	The Distribution of Metals in the Intergalactic Medium
11:30	10	E. Scannapieco	The Sources of Intergalactic Metals
11:40	10	V. Kulkarni	Evolution of Metals in Galaxies: Clues from the Damped Lyman-alpha Absorbers
11:50	10	D. Maoz	Star Formation and Metal-enrichment History in Clusters and in the Field from SNe
12:00	30	Questions and Discussion	
12:30	30	Photo Session	

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Tuesday afternoon, August 19, 2003

4. How do Galaxies grow?

Time	Min.	Speaker	Title
14:30	30	M. Steinmetz	Introduction to Session
15:00	20	M. Franx	The Evolution of Galaxies from very deep Near-IR imaging
15:20	20	B. Abraham	First Results from the Gemini Deep Deep Survey
15:40	20	H. Ferguson	Early Results from the Great Observatories Origins deep Survey
16:00	15	Questions and Discussion	
16:15	30	Coffee Break	
16:45	20	O. Le Fevre	Early results from the VIMOS VLT Deep Survey
17:05	20	A. Renzini	Massive Galaxies at High Redshift from K20+GOODS
17:25	20	A. Szalay	The Clustering of SDSS Galaxies as a Function of Color
17:45	20	O. Gerhard	Models for Disk Galaxy Formation
18:05	30	Questions and Discussion	

Time	Social Program
19:30	Drinks
20:00	Conference Dinner (ETH Center, Dozentenfoyer, J-Floor)

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Wednesday morning, August 20, 2003

5. When and how are Fundamental Scaling Relations set?

Time	Min.	Speaker	Title
08:30	30	G. Illingworth	Introduction to Session
09:00	20	H.-W. Rix	An empirical picture of the evolution of galaxies from the COMBO-17 survey
09:20	20	G. Kauffmann	Galaxy Scaling Relations in the SDSS and their Dependence on Environment
09:40	20	T. Heckmann	Host Galaxies of AGN in the SDSS
10:00	15	Questions and Discussion	
10:15	30	Coffee Break	
10:45	20	K. Gebhardt	Relationship of Black Hole to Host Galaxy: Properties and Evolution
11:05	20	M. Begelman	Feedback effects from growth of supermassive black holes
11:25	20	D. Merritt	Origin of Black Hole Scaling Relations
11:45	30	Question and Discussion	

Wednesday afternoon, August 20, 2003

Excursions

Time	
12:45	Rigi
13:45	Rhine Falls

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Thursday morning, August 21, 2003

6. What is the underlying Physics of Disk Formation?

Time	Min.	Speaker	Title
08:30	30	F. van den Bosch	Introduction to Session
09:00	20	D. Pfenniger	Gas Dynamic Spiral Galaxies
09:20	20	L. Mayer	Galaxy Formation in SPH Simulations: Physical and Numerical Effects
09:40	10	I. Ferreras	Near and Far: Comparing local and High-redshift Disk Galaxies to Constrain their Star Formation Histories
09:50	20	J. Dalcanton	Constraints on Galaxy Formation from Edge-On Disks
10:10	15	Questions and Discussion	
10:25	30	Coffee Break	
10:55	20	R. Sancisi	HI Holes, HI halos and gas infall
11:15	20	R. Giovanelli	Spiral Galaxy Scaling Laws and their Cosmological Application
11:35	10	S. Kannappan	Forming Young Bulges within Existing Disks: Statistical Evidence for External Drivers
11:45	20	M. Carollo	Dense Disks and Small Bulges
12:05	30	Questions and Discussion	

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Thursday afternoon, August 21, 2003

7. How does a Dense Environment Affect Galaxies?

Time	Min.	Speaker	Title
14:00	30	S. White	Introduction to Session
14:30	20	C. Baugh	Disentangling the high redshift universe
14:50	10	S. Gottloeber	Formation and Evolution of DM Halos in Different Environment
15:00	20	D. Zaritsky	A Case Study of Galaxy Evolution in a locally dense Environment
15:20	20	G. Fabbiano	The X-Ray Properties of Galaxies
15:40	15	Questions and Discussion	
15:55	30	Coffee Break	
16:25	20	A. Zabludoff	The Roles of Environment in Galaxy Evolution
16:45	10	M. Arnaboldi	PRGS and the TF Relations: Implications for the DH Shape
16:55	10	P. Norberg	On the Existence of Extended Dark Matter Halos around Galaxies
17:05	20	J. van Gorkom	The fate of cold gas in cluster galaxies
17:25	20	P. McCarthy	Old Galaxies at $z > 1$
17:45	30	Questions and Discussion	

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Friday morning, August 22, 2003

8. How do Baryons and Dark Matter Interact?

Time	Min.	Speaker	Title
08:30	30	B. Moore	Introduction to Session
09:00	20	A. Klypin	Cusps, dynamical friction, and resonances
09:20	10	B. Metcalf	A Spectroscopic Gravitational Lensing and Limits on the Dark Matter Substructure
09:30	10	E. D'Onghia	The Angular Momentum Problem in CDM Halos
09:40	10	C. Keeton	Galaxy Masses with Strong Lensing
09:50	10	J. Diemand	Resolving the Inner Structure of CDM Clusters
10:00	20	C. Porciani	The Halo Occupation Distribution of 2dF Galaxies
10:20	15	Questions and Discussion	
10:35	25	Coffee Break	
11:00	20	R. de Jong	Properties of Dark Matter Halos in Disk Galaxies
11:20	20	J. Sellwood	A Dynamical Friction and Halo Densities
11:40	20	N. Katz	How Galaxies Get Their Gas
12:00	30	Questions and Discussion	

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Friday afternoon, August 22, 2003

9. Session Summaries

Time	Min.	Speaker	Title
13:45	30	J. Silk	Session 4 - How do galaxies grow?
14:15	30	T. de Zeeuw	Session 5 - When & how are fundamental scaling relations set?
14:45	30	K. Freeman	Session 6 - What is the underlying physics of disk formation?
15:15	30	S. Tremaine	Session 7 - How does a sense environment affect galaxies?
15:45	15	Coffee Break	
16:00	30	R. Ellis	Session 8 - How do baryons and dark matter interact?
16:30	30	C. Norman	Session 3 - How does metallicity of the Universe develop?
17:00	30	P. Madau	Session 1 - When and where was First Light?
17:30	30	S. Lilly	Session 2 - When did reionization occur and what did it?

Time	Farewell
18:00	Farewell Cheese & Wine, in front of Audi Max
20:00	End of Conference

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