

IAUS333 PROGRAMME - FINAL

Sun, 01 Oct 2017

17:30-19:00

REGISTRATION and WELCOME DRINK

Mon, 02 Oct 2017

08:30-09:00

REGISTRATION

09:00-10:30 Session 1

Chair: M. Santos

Welcome

10min

Cosmic Dawn and Epoch of Reionization: theory and simulations

A. Mesinger (IR)	Cosmic Dawn and Epoch of Reionization: theory and simulations	35min
B. Greig	Simultaneously constraining the astrophysics of reionisation and the epoch of heating with 21CMMC	15min
Y. Xu	Modeling the Neutral Islands during the Late Epoch of Reionization	15min
J.-B. Durrive	Mean Energy Density of Photogenerated Magnetic Fields Throughout the Epoch of Reionization	15min

10:30-11:00 Coffee Break

11:00-12:30 Session 2

Chair: M. Santos

K. Datta (IT - remote talk)	Towards simulating and quantifying the light-cone EoR 21-cm signal	25min
E. Garaldi	Quasars at the Cosmic Dawn: effects on Reionization properties in cosmological simulations	15min
J. Seiler	Exploring Reionization With Semi-Analytics: The Escape Fraction Strikes Back	15min
H. Ross	Simulating X-ray heating during the Cosmic Dawn	15min
P. Ocvirk	Cosmic Dawn II: radiation-hydrodynamics of galaxy formation during the epoch of reionization	15min

12:30-13:30 Lunch Break

13:30-15:00 Session 3

Chair: E. Chapman

D. Aubert	The reionization epoch of $z=0$ halos.	15min
S. Hassan	Reionization Models Classifier using 21cm Maps Deep Learning	15min
R. Kooistra	Detecting HI 21 cm emission from the IGM in large scale filaments with current and future radio telescopes	15min
K. Hoffmann	Signatures of Cosmic Reionization on the 21-cm 3-Point Correlation	15min
G. Mellema	Analysis of Tomographic 21-cm Data	15min
S. Majumdar	Quantifying the non-Gaussianity in the EoR 21-cm signal through bispectrum	15min

15:00-15:30 Coffee Break

15:30-17:00 Session 4

Chair: E. Chapman

H. Padmanabhan (IT)	Neutral hydrogen in the post-reionization universe	25min
M. Silva	Line Intensity Mapping during the Epoch of Reionization	15min

Cosmic Dawn and Epoch of Reionization: observations, challenges and first results

S. Zaroubi (IR)	Cosmic Dawn and Epoch of Reionization: observational challenges	35min
J. Bowman	Results from EDGES	15min

Tue, 03 Oct 2017

09:00-10:30 Session 5

Chair: S. Zaroubi

J.C. Pober (IT)	Results from PAPER	25min
R. Webster (IT)	Results from MWA-EoR	25min

	L. Koopmans (IT)	Results from LOFAR-EoR	25min
	B.K. Gehlot	Epoch of Reionization on large angular scales with LOFAR and AARTFAAC	15min
10:30-11:00	Coffee Break		
11:00-12:30	Session 6		
	B. Pindor	MWA Observations of EOR1 field	15min
	G. Bernardi	Measurements of the global signal from the Cosmic Dawn	15min
	B. McKinley	Measuring the Global EoR Signal using the Moon and the MWA	15min
	J.S. Dillon	Precision Calibration for 21 cm Cosmology with HERA	15min
	C. Trott (IT)	SKA-CD/EoR project	25min
12:30-13:30	Lunch Break		
13:30-15:00	Session 7		
	R. Dr. Ghara	21-cm signature of the first sources in the Universe: Prospects of detection with SKA using matched filters	15min
	N. Thyagarajan	Status of Foreground and Instrument Challenges for 21cm EoR Experiments - Design and Analysis Strategies for SKA and HERA	15min
	R. Joseph	Redundant Calibration: Breaking the constraints of limited sky information	15min
	H. Shimabukuro	Analysing the 21cm signal with artificial neural networks	15min
	M.W. Eastwood	Full-Sky Maps of the VHF Radio Sky with the Owens Valley Long Wavelength Array	15min

14:45-15:30 Coffee Break

15:30-17:00 Session 8

Chair: G. Mellema

The first stars/galaxies, EoR and multi-frequency constrains

	M. Langer (IT)	CMB constraints on the EoR through the measurement of the Thompson optical depth	25min
	M. Haehnelt	Probing reionization with Lyman-alpha and 21cm emission/absorption	15min
	S.E.I. Bosman	The opacity of Lyman-alpha absorption up to $z = 6.2$ with a sample of $90+ z > 5.7$ quasars	15min
	N. Yoshida (IR)	First stars/galaxies and EoR	35min

17:00-17:30 Coffee Break

17:30-18:30

DISCUSSION

Wen, 04 Oct 2017

09:00-10:30 Session 9

Chair: G. Bernardi

Galactic foreground science

	M. Haverkorn (IR)	Galactic foreground science: radio emission, polarisation, ISM and magnetic fields	35min
	S. Choudhuri	The angular power spectrum measurement of the Galactic synchrotron emission in two fields of the TGSS survey	15min
	C. Sobey (IT)	Using low-frequency pulsar observations to study the 3-D structure of the Galactic magnetic field	25min
	F. Boulanger	Statistical modelling of dust polarization as a CMB foreground	15min

10:30-11:00 Coffee Break

11:00-12:30 Session 10

Chair: G. Bernardi

	M.-A. Miville-Deschenes (IR)	Galactic foreground science: multi-wavelength approach to constrain ISM	35min
	S. Clark (IT)	Galactic HI and the Magnetic ISM Foreground	25min

Extragalactic foreground science

	A. Meszaros	Spatial distribution of the gamma-ray bursts at very high redshift	15min
	K. Tisanic	Average radio spectral energy distribution of highly star forming galaxies	15min

12:30-13:30 Lunch Break

16:30-17:30

GUIDED TOUR OF OLD TOWN DUBROVNIK sponsored by Dubrovnik Tourist Board

60min

meeting pont: in front of Tourist Information Office at Pile, Brsalje 5, Dubrovnik

19:30-22:00

CONFERENCE DINNER

Gradska kavana Arsenal, Pred Dvorom 1 - Old Town Dubrovnik

Thu, 05 Oct 2017

09:00-10:30 Session 11

Chair: T. van der Hulst

I. Prandoni (IR)

Galaxies/AGNs and their evolution

35min

M. Jarvis (IR)

Extragalactic foreground science: multi-wavelength approach and cosmic evolution

35min

L. Ceraj

Radio luminosity functions of AGN with moderate-to-high radiative luminosities out to $z \sim 6$ in the COSMOS field

15min

10:30-11:00 Coffee Break

11:00-12:30 Session 12

Chair: T. van der Hulst

The first stars/galaxies, EoR and multi-frequency constrains

Z. Ivezić (IT)

LSST and the Epoch of Reionization experiments

25min

A. Fialkov

Tracing Cosmic Dawn

15min

R. Laureijs

Observing the high redshift Universe with Euclid

15min

G. Lagache (IT)

Exploring the dusty star-formation in the early Universe using CIB and [CII]-line intensity mapping

25min

A. Hutter

Exploring 21cm - galaxy synergies

15min

12:30-13:30 Lunch Break

13:30-15:00 Session 13

Chair: T.-C. Chang

Foreground mitigation

E. Chapman (IR)

Methods of foreground mitigation in the EoR

35min

A. Bonaldi (IT)

EoR imaging with the SKA: the challenge of foreground removal

25min

S. Murray

Between Window and Wedge: An Improved Statistical Point-Source Foreground Model for the EoR

15min

The first stars/galaxies, EoR and multi-frequency constrains

E. Evan

A new public 21-cm EoR signal database, and how it can make your life sunnier

15min

15:00-15:30 Coffee Break

15:30-17:00 Session 14

Chair: T.-C. Chang

B. Yue

Detecting the reionization galaxies through the gravitational lensing

15min

G. Kulkarni

Evolution of the UV luminosity function of AGN and its implications for the 21 cm signal from the epoch of reionization

15min

L.V. Toth

The structure of the ISM in the Zone of Avoidance by high-resolution multi-wavelength observations

15min

C. Binggeli

LYCAN: The LYman Continuum ANalysis project

15min

S. Giri

Constraining Lyman continuum escape using Machine Learning

15min

C. Schmit

Emulation of reionization simulations for Bayesian inference of astrophysics parameters using neural networks.

15min

18:15-21:15

PUBLIC TALK in Croatian and STARGAZING

The Museum of Modern Art Dubrovnik, Frana Supila 23, Dubrovnik

Fri, 06 Oct 2017

09:00-10:30 Session 15

Chair: V. Jelic

Foreground mitigation

A. Datta	Foreground Subtraction in redshifted 21cm Global Signal Experiments using Artificial Neural Networks	15min
L. Olivari	Intensity Mapping Foreground Cleaning with Generalized Needlet Internal Linear Combination	15min
F.G. Mertens	A non-parametric method for clean foregrounds removal in 21-cm EoR observations	15min
S. Yoshiura	Foreground mitigation strategy for measuring the 21cm-LAE cross-correlation	15min

SUMMARY AND FINAL DISCUSSION

30min

10:30-11:00 Coffee Break**12:30-13:30 Lunch**

IR an invited review

IT an invited talk