FINAL AGENDA
Keynote 40 min, Invited 30 min, Contributed 15 min, all including questions.

MONDAY November 4

8:45 Welcome - Boulanger & Falgarone

9:00 - Gas Physics, Star Formation and Galaxy Evolution – I
Chair: Patrick Hennebelle
KN Faucher-Giguère – Challenges: Galaxy formation and evolution
IT Fu – Understanding Galaxy Evolution with Dusty Starburst Galaxies at High-Redshift
CT Guillard - Is accretion-driven turbulence a key process for galaxy growth?

10:25 Coffee

11:00 - Turbulence, Plasmas, Magnetic Fields and Cosmic Rays – I
Chair: Kandaswami Subramanian
KN Pouquet - Dissipation in MHD turbulence
CT Grete - Correlations and energy transfer in compressible isothermal and adiabatic MHD turbulence
IT Zhdankin - Intermittency of magnetohydrodynamic and kinetic turbulence

12:30 LUNCH

15:00 - Gas Physics, Star Formation and Galaxy Evolution – II
Chair: Chang-Goo Kim
KN Burkert – Challenges: Star formation, now and then
IT Meidt - Molecular gas in the Milky Way and nearby galaxies
IT Richter – The many probes of the CGM (video talk)

Poster Flash Talks (10 min)

16:50 Coffee

17:15 - Gas Physics, Star Formation and Galaxy Evolution – III
Chair: Claude-André Faucher-Giguère
IT Genzel - The evolution of the ionized gas velocity dispersion in SF galaxies
IT Oh – Turbulent Mixing Layers : cold gas, hot winds
CT Semenov - The role of ISM turbulence in regulation of star formation in galaxies

DISCUSSION 1 (30min)
The role of turbulence in galaxy evolution
Chairs: Tacconi, Lehnert

WELCOME DRINK

TUESDAY November 5
9:00 - Gas Physics, Star Formation and Galaxy Evolution – IV
Chair: Ute Lisenfeld
KN Bykov - Challenges in The Hot and Relativistic Universe
IT Lehnert - Observations of the multiphase large scale environment of galaxies at high redshift
CT Mohapatra - Stratification and turbulence in the intracluster medium

10:25 Coffee

11:00 - Turbulence, Plasmas, Magnetic Fields and Cosmic Rays – II
Chair: Annick Pouquet
IT Alexandrova - Solar wind turbulence
IT Passot - Energy dissipation in the Solar wind: theoretical challenges
IT Matthaeus - Who needs turbulence? Cascade, intermittency and Reynolds number in solar wind-like plasmas (video talk)

12:30 LUNCH

15:00 - Turbulence, Plasmas, Magnetic Fields and Cosmic Rays – III
Chair: Andrei Bykov
KN Subramanian – Challenges: The Origin of cosmic magnetism
CT Seta - Magnetic fields in elliptical galaxies: a probe of fluctuation dynamo
IT Bhattacharjee – Magnetic reconnection (video talk)

16:25 Coffee

17:00 - Turbulence, Plasmas, Magnetic Fields and Cosmic Rays – IV
Chair: Olga Alexandrova
IT Pfrommer - Cosmic rays and magnetic fields in galaxies
CT Tjus - Plasma investigations of the connection between turbulence and cosmic ray transport in the ISM
CT Vinogradov - MMS observations of thin current sheets in the solar wind
CT Saveliev - A Stringent Limit on Primordial Magnetic Fields from the Cosmic Microwave Background Radiation

DISCUSSION 2:
Are turbulent cascades and dissipative processes adequately captured in numerical models?
Chairs: Pouquet, Zhdankin, Falgarone

WEDNESDAY November 6

9:00 - Gas Physics, Star Formation and Galaxy Evolution – V
Chair: Christoph Pfrommer
IT Miville-Deschênes - The multi-phasic ISM: observations (video talk)
CT Bellomi - 3D chemical structure of the turbulent diffuse interstellar medium
CT Girichidis - The chemistry and dynamics of the turbulent ISM including cosmic rays

10:00 Coffee

10:30 - Gas Physics, Star Formation and Galaxy Evolution – VI
Chair: Peng Oh
IT Zaroubi - 21 cm Cosmology and the Epoch of Reionization
IT Fialkov - Hydro simulations of cosmic dawn
CT Lewis - Cosmic Dawn II: galactic photon budget and CGM

Poster Flash Talks (10 min)

DISCUSSION 3:
Do we need non-linear physics to understand how the universe was re-ionized?
Chairs: Zaroubi, Fialkov, Boulanger

12:30 LUNCH

Free afternoon
14h – Departure of bus to Piana

THURSDAY November 7

9:00 - Gas Physics, Star Formation and Galaxy Evolution – VII
Chair: Jérôme Pety
KN Godard - Molecules and Turbulence: Following the energy trail
IT Lesaffre - Dissipation of compressible MHD turbulence
IT Hily-Blant - The small-scale structure of diffuse molecular ISM

10:40 Coffee and poster viewing

11:10 - Gas Physics, Star Formation and Galaxy Evolution – VIII
Chair: Pierre Guillard
IT Hennebelle - Formation of structures in the turbulent magnetized ISM
CT Mocz - Pre-stellar core formation from dense shocked regions in supersonic isothermal magnetoturbulence
IT Kim - Feedback regulated star formation

12:30 LUNCH

15:00 - Gas Physics, Star Formation and Galaxy Evolution – IX
Chair: Philipp Girichidis
IT Lochhaas - Multi-phase circumgalactic medium: fast winds, slow shells
CT Lehmann - Self-irradiated molecular shock waves: probing turbulent cascades
IT Appleton - Large-scale turbulence in action in multi-phase intergalactic gas in pairs and groups of galaxies
CT Lisenfeld – Radio continuum emission in the bridges of collisional galaxy systems

16:30 Coffee and poster viewing

17:00 - Gas Physics, Star Formation and Galaxy Evolution – X
Chair: Matt Lehnert
IT Verhamme - Lyman alpha emission around galaxies at high redshift
CT Richings - The effects of local stellar radiation on non-equilibrium ISM chemistry and ISM line diagnostics
IT Noterdaeme - Atomic and molecular hydrogen along quasar/GRB lines of sight
IT Hopkins - Cosmo-hydro simulations of galaxy formation (video talk)

DISCUSSION 4:
Have numerical simulations a predictive power?
Chairs: Klessen, Lesaffre, Appleton

CONFERENCE DINNER

FRIDAY November 8

8:45 - Turbulence, Plasmas, Magnetic Fields and Cosmic Rays – V
Chair: Ralf Klessen
IT Pety – The Orion B project: from multi-line observations to GMC physics
CT Brahimi - Cosmic Rays and Interstellar medium turbulence dynamics
CT Martin-Alvarez - Tracing the origin and fate of magnetic fields in galaxies
IT Dubois - Dynamical effects of CR on ISM and galactic winds (video talk)
CT Bennett - Resolving shock heating, turbulence and the baryon cycle in high redshift massive galaxies

10:30 Coffee

11:00 - Statistical analysis and modelling of data
Chair: Pierre Lesaffre
IT Ensslin - The turbulent Galaxy via information field theory
CT Levrier- The Reduced Wavelet Scattering Transform, a comprehensive statistical description of the non-Gaussian ISM
CT Beattie - Reconstructing the three-dimensional density distribution of observed, strongly-magnetised, turbulent molecular clouds
CT Durrive - An analytical stochastic representation of 3D MHD turbulence

12:15 LUNCH

14:30 DISCUSSION 5:
How will future observations challenge us?
Chairs: Pety, Ensslin
15:00 - CLOSING LECTURE
Boulanger & Falgarone: What have we learned (during the meeting)?

15:30 END OF THE MEETING