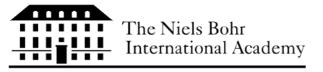
### 3rd ICM Theory & Computation Workshop A. Evrard, M. Pessah, & M. Ruszkowski



### Niels Bohr Institute, Aug 11 - 14, 2014







VILLUM FOUNDATION 🚿



### PRACTICAL INFO

- Coffee break Aud. C (registration)
- Lunch NBI canteen (take bag & show badge)
- Restrooms downstairs & NBIA (down the hall)
- Espresso machine NBIA lounge (keep walking)
- Quiet room for work (NBIA downstairs)

### Map of Niels Bohr Institute

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### PRACTICAL INFO - Speakers

- Talk slots are 25 min. long TOTAL (20+5)
- Discussion panel-type after each session
- Please upload talk to INDICO (see website)

# WiFi Networks Eduroam - use your user name Conference - ask for password

### PRACTICAL INFO - Moderators

: Sessions / : Talks

: Breaks

### 3rd ICM Theory and Computation Workshop

from Monday, 11 August 2014 (09:00) to Thursday, 14 August 2014 (14:00)

Monday, 11 August 2014 Tuesday, 12 August 2014 Wednesday, 13 August 2014 Thursday, 14 August 2014 AM 11:30 Registration (until 12:30) 99:00 Tuesday morning - Mateusz Ruszkowski 09:00 Wednesday morning - Daisuke 09:00 Thursday morning - Mark Voit (Michigan State (University of Michigan) (until 12:30) Nagai (Yale University) (until 12:30) University) (until 12:30) 12:30 --- Welcoming Lunch ---09:00 The origin of cold gas in giant ellipticals and its role in 09:00 Cosmic ray heating in cool core clusters 09:00 Gas Accretion and Non-Equilibrium Phenomena in fueling AGN feedback - Norbert Werner (Stanford - Christoph Pfrommer (HITS) the Outskirts of Galaxy Clusters - Daisuke Nagai -(Yale University) University) 09:25 Gas density and velocity power spectra 09:25 Raining onto black holes: chaotic cold accretion driving in galaxy clusters - Eugene Churazov 09:25 Simulating galaxy populations within clusters -AGN feedback - Massimo Gaspari (Max Planck Institute (MPA) Brian O'Shea (Michigan State University) for Astrophysics) 09:50 The Generation, Evolution and 09:50 Analytical model for non-thermal pressure in galaxy 09:50 Modeling AGN Feedback in Cool-Core Galaxy Clusters Transport of Turbulence During clusters - XUN SHI (Max Planck Institute for - Yuan Li (Columbia University) Structure Formation - Tom Jones (U Astrophysics) -Minnesota) --- Coffee break ---10:15 10:15 --- Coffee break ---10:15 --- Coffee break ----11:00 Thermal instability paradigm for cold gas in cluster 11:00 The Effects of Accretion History on the Cluster cores: effects of thermal conduction, turbulence and 11:00 Hydrodynamical Simulations of Non-Temperature Profile and Cosmological Observables AGN jets - Prateek Sharma (IISc Bangalore) thermal Pressure in Galaxy Clusters -- Ian Parrish (Canadian Institute for Theoretical Kaylea Nelson (Yale University) -Astrophysics) 11:25 Spherical accretion and AGN feedback - Paul Nulsen 11:25 Temperature Structure of the Intra-(Harvard-Smithsonian Center for Astrophysics) 11:25 Cosmic rays in galaxy clusters and their non-thermal emission - Anders Pinzke (Dark Cosmology Cluster Medium from SPH and AMR 11:50 --- Discussion ----Simulations - Elena Rasia (University of Centre, University of Copenhagen) Michigan) 12:30  $\overline{\phantom{a}}$ ---- Lunch ----11:50 --- Discussion ----11:50 --- Discussion ---12:30 --- Lunch ---12:30 ---- Lunch ----13:45 Tuesday afternoon - Alexander Schekochihin PM 13:45 Opening Remarks (until 14:00) - 14:00 Wednesday afternoon - Paul (University of Oxford) (until 16:30) Nulsen (Harvard-Smithsonian Center 14:00 Monday afternoon - August Evrard (University for Astrophysics) (until 17:05) 13:45 Magnetohydrodynamics in a Weakly Collisional of Michigan) (until 17:30) Intracluster Medium - James Stone (Princeton 14:00 Damped and Driven Waves in Galaxy 14:00 Gas Flows in Galaxy Clusters - Brian McNamara Clusters - Ellen Zweibel (U Wisconsin-University) -(University of Waterloo) Madison) -14:10 Magnetic fields and the Helium content in the 14:25 Witnessing the ongoing growth of nearby clusters of intracluster medium - Thomas Berlok (NBIA) 14:25 Shock Waves in Galaxy Clusters -galaxies - Aurora Simionescu (ISAS/JAXA) Marcus Bruggen (University of Hamburg) 14:35 --- Coffee break --- $\overline{\phantom{a}}$ 14:50 New observational constraints on microphysical 15:05 Fluid flow experiments in galaxy clusters: Using cluster properties of the intracluster plasma - Maxim 14:50 Spectral Composition of Cosmic Rays galaxies and minor mergers as probes for transport Markevitch (NASA/GSFC) in Galaxy Clusters - Samuel Skillman coefficients of the ICM - Elke Roediger (Hamburger (Stanford, SLAC) 15:15 --- Coffee break ---Sternwarte) 15:15 --- Coffee break ---16:00 Magnetic field evolution in a weakly collisional Evolution (or not) of Cool Cores - Mark Voit (Michigan 15:30 high-beta ICM - Alexander Schekochihin (University 16:00 Kinetic simulations of cosmic ray State University) of Oxford) acceleration at shocks - Damiano 15:55 --- Discussion ---Caprioli (Princeton University) 16:25 High-order Numerical Methods for Plasma 16:30 Conference Dinner (until 21:00) (Restaurant) 16:25 Simulations on Large-scale High-Performance --- Discussion ---Computing Architectures - Dongwook Lee (The 17:05 Beer in the Park (until 18:05) (n/a) University of Chicago) 16:50 --- Discussion ----

### SOCIAL EVENTS

• Picture - Tuesday 10:30 - before coffee break

• Dinner at Lousiana - Tuesday 16:30 - 21:00

• Beer in Fælledparken - Wednesday 16:30

• Tour NBI - Wed. & Thurs. 13:30 - at reception



## Enjoy the workshop!

