

The Dynamic Universe

Wednesday, 18/3/2019

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| 15:00 | 15:40 | Arrival & Coffee and Tea | |
| 0. Opening session (Chair: Klessen) | | | |
| 15:40 | 16:00 | The role of Black Holes in elliptical galaxy mergers | Ralf Bender |
| 16:00 | 16:20 | Cosmic Nursery of galaxies and black holes | Sadegh Kochfar |
| I. ISM, Molecular Clouds, Filaments and Cores | | | |
| 16:20 | 16:40 | The Bones of the Milky Way | Alyssa Goodman |
| 16:40 | 17:00 | Synthetic Large-Scale Galactic Filaments OR A New Map of Our Local Interstellar Medium | Catherine Zucker |
| 17:00 | 17:20 | Fragmentation of gas filaments in Orion | Alvaro Hacar |
| 17:20 | 17:40 | The cores and filaments in Andi's bathtub | João Alves |
| 17:40 | 18:00 | ISM Correlations in Extreme Environments | Bruce Elmegreen |
| 18:00 | 18:20 | The dependence of stellar properties on initial conditions and environment | Matthew Bate |
| 18:20 | 18:30 | Discussion | |
| 18:30 | 19:30 | Dinner | |

Thursday, 19/3/2019

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| 08:00 | 09:00 | Breakfast | |
| 09:00 | 09:20 | The Global Hierarchical Collapse Scenario for Star-Forming Molecular Clouds | Enrique Vazquez-Semadeni |
| II. Star Formation, Evolution and Feedback (Chair Dolag) | | | |
| 09:20 | 09:40 | Star formation in spiral arms and colliding flows | Clare Dobbs |
| 09:40 | 10:00 | A semi-analytic feedback model for star clusters and its application to ISM dynamics and galaxy evolution | Ralf Klessen |
| 10:00 | 10:20 | Star formation at low rates: how a lack of massive stars impacts stellar feedback and the evolution of dwarf galaxies | Gerhard Hensler |
| 10:20 | 10:30 | Discussion | |
| 10:30 | 11:00 | Coffee and Tea Break | |
| 11:00 | 11:20 | The Dynamics of Star Formation in the Carina Nebula revealed by multi-wavelength surveys: what we have learned and what still remains unclear | Thomas Preibisch |
| 11:20 | 11:40 | Does the initial turbulent condition matter for star formation simulations? | Lee Hartmann |
| 11:40 | 12:00 | The role of the magnetic field in star formation | Evangelia Ntormousi |
| 12:00 | 12:20 | From Brick to Dust | Fabian Heitsch |
| 12:20 | 12:30 | Discussion | |
| 12:30 | 13:30 | Lunch | |
| III. Galaxies / Galaxy Evolution (Chair Tacconi) | | | |
| 13:30 | 13:50 | Trojans in the solar neighborhood | Elena D'Onghia |
| 13:50 | 14:10 | The puzzle of globular cluster formation | Thorsten Naab |
| 14:10 | 14:30 | Can Chaos support morphological structures in galaxies? | Panos Patsis |
| 14:30 | 14:50 | The Last Merging Episode Imprinted in the Phase Space of Dwarf Galaxies | Shunsuke Hozumi |
| 14:50 | 15:10 | Interpreting the Milky Way's 26Al signal with Galaxy-scale superbubble simulations | Martin Krause |
| 15:10 | 15:30 | Dynamical modelling of supermassive black holes in galactic-scale simulations | Peter Johansson |

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| 15:30 | 16:00 | Coffee and Tea Break | |
| 16:00 | 16:20 | The origin of central dark-matter fraction in galaxies | Avishai Dekel |
| 16:20 | 16:40 | The art of modelling nebular emission lines of galaxies over cosmic time | Michaela Hirschmann |
| 16:40 | 17:00 | What is the nature of the observed giant clumps in high-z disc galaxies? | Manuel Behrendt |
| 17:00 | 17:20 | The Young and the Wild: Protoclusters and their galaxies at $z=4$ | Rhea-Silvia Remus |
| 17:20 | 17:40 | The mass-metallicity-relationship of galaxies: an attempt to understand the physics behind it | Rolf Kudritzki |
| IV. Planets | | | |
| 17:40 | 18:00 | Disks and Planets around binary Stars | Willy Kley |
| 18:00 | 18:20 | Planet Formation in the ALMA Era | Till Birnstiel |
| 18:20 | 18:30 | Discussion | |
| 18:30 | 19:30 | Dinner | |
| After Dinner Talks | | | |
| 20:30 | 20:50 | How a star was born: a young student rushed into astrophysics | Gerhard Hensler |
| 20:50 | 21:10 | The Heidelberg Years | Ralf Klessen |
| 21:10 | 21:30 | Excellence Cluster Adventures | Stephan Paul |

Friday, 20/3/2019

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| 08:00 | 09:00 | Breakfast | |
| V. The Real and the Simulated Universe (Chair Johansson) | | | |
| 09:00 | 09:20 | Local Group Dynamics | Edvige Corbelli |
| 09:20 | 09:40 | Empirical constraints on the formation of galaxies | Ben Moster |
| VI. Galactic Nuclei | | | |
| 09:40 | 10:00 | How Do Galaxy Centers Get Their Gas? | Mark Krumholz |
| 10:00 | 10:20 | Rejuvenated Young Stars in the Galactic Center | Doug Lin |
| 10:20 | 10:30 | Discussion | |
| 10:30 | 11:00 | Coffee and Tea Break | |
| 11:00 | 11:20 | Active Galactic Nucleus Disks as a Favored Location for Black Hole Mergers Observed by LIGO/VIRGO | Mordecai Mac Low |
| 11:20 | 11:40 | Accelerated orbital decay of supermassive black hole binaries in merging nuclear star clusters | Go Ogiya |
| 11:40 | 12:00 | The search for black holes with supercomputers | Rainer Spurzem |
| VII Closing Talk | | | |
| 12:00 | 12:20 | The evolution of star forming disk galaxies | Reinhard Genzel |
| 12:20 | 12:30 | Discussion | |
| 12:30 | 13:30 | Lunch | |
| 14:00 | | Departure | |