

The 7th Korean Astrophysics Workshop on Dynamics of Disk Galaxies

October 21-24, 2013

International Conference Hall, Building 25-1, Seoul National University, Seoul, KOREA

Oct. 21, Monday (Day 1)

[08:00-08:50] Registration

[08:50-09:00] Welcome Address

Myung-Hwan Kim (Dean of the College of Natural Sciences, Seoul National University)

Session 1 Disk Structure

Chair: Ortwin Gerhard

[09:00-09:25] Understanding Assembly of Disks using Local and High Redshift Bars from the Spitzer Survey of Stellar Structure in Galaxies, DEEP2, AEGIS and COSMOS

Kartik Sheth (National Radio Astronomy Observatory)

[09:25-09:50] Multi-component Structural Decompositions of S4G Galaxies

Eija Laurikainen (Finnish Centre for Astronomy with ESO)

[09:50-10:15] Bar Parameter Evolution over the Last 7 Gyr

Isabel Perez (Universidad de Granada)

[10:15-10:30] Disk Breaks of Barred Galaxies at 3.6 μm with the Spitzer Survey of Stellar Structure in Galaxies (S4G)

Taehyun Kim (Seoul National University)

[10:30-10:40] Photo Session

[10:40-11:00] Coffee Break

[11:00-11:25] Connections between Stellar Populations and Disk Dynamics

Stacy McGaugh (Case Western Reserve University)

[11:25-11:50] Structure of Bulges and Bars

Juntai Shen (Shanghai Astronomical Observatory)

[11:50-12:15] The Origin of Thick Discs and Some Comparisons on the Results on the Thick Disc in the Milky Way with Those on Nearby Galaxies

Sebastien Comeron (FINCA)

[12:15-12:30] The Portrait of Malin 2: on the General Structure of the Giant Low Surface Brightness Galaxy

Anastasia Kasparova (SAI MSU)

[12:30-12:45] The Distribution of Mass within Spiral Galaxies: Unique Solutions from Gas and Stellar Kinematics

Thomas Martinsson (Leiden Observatory)

[12:45-14:00] Lunch

Session 2	Pattern: Observation	Chair: Lia Athanassoula
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[14:00-14:25] High Resolution 2D Velocity Fields in Disk Galaxies: Spurs, Feathers, and Interlocking Resonances

John Beckman (Instituto de Astrofísica de Canarias)

[14:25-14:50] The Central Black Hole Mass - Spiral Arm Pitch Angle Relation: Results and Future Work

Julia Kennefick (University of Arkansas/Fayetteville)

[14:50-15:15] The Signatures of Long-lived Spirals in Disk Galaxies.

Eric Martinez-Garcia (INAOE)

[15:15-15:30] Testing Density Wave Theory with Stellar Populations around Spiral Arms in M81

Yumi Choi (University of Washington)

[15:30-15:45] The Central Mass Distribution of Spiral Galaxies from Their Inner Rotation Curves

Santiago Erroz-Ferrer (IAC)

[15:45-16:15] Coffee Break

[16:15-16:40] Bar-driven Spirals

Heikki Salo (Univ. of Oulu, Finland)

[16:40-17:05] Morphology and Environment of Spiral Galaxies

HongBae Ann (Pusan National University)

[17:05-17:20] N-body Simulations of Double-barred (S2B) Galaxies From Cold Inner Disks

Min Du (Shanghai Astronomical Observatory)

[17:20-17:35] Uncertainties in the Deprojection of The Observed Bar Properties

Yanfei Zou (Shanghai Astronomical Observatory)

Oct. 22, Tuesday (Day 2)

Session 3	Pattern: Theory	Chair: Kristine Spekkens
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[09:00-09:50] Spiral Structure in Galaxies

Jerry Sellwood (Rutgers University)

[09:50-10:15] Manifold-Driven Spiral Structure

Lia Athanassoula (Laboratoire d'Astrophysique de Marseille, FRANCE)

[10:15-10:30] The Likelihood of Bars in Galaxies

Albert Bosma (Laboratoire d'Astrophysique de Marseille, FRANCE)

[10:30-11:00] Coffee Break

[11:00-11:25] Dynamics of the ISM in Galactic Spirals

Keiichi Wada (Kagoshima University)

[11:25-11:50] A Large Scale MHD, Resonance-Related Instability in a Galactic-Like Spiral Disk and its Consequences

Marco Martos (UNAM)

[11:50-12:05] Spiral Structure and Mass Inflows in Spiral Galaxies

Yonghui Kim (Seoul National University)

[12:05-12:20] Nuclear Rings in Simulated Barred Galaxies

Zhi Li (Shanghai Astronomical Observatory)

[12:20-12:35] A Numerical Study of Star Formation in Nuclear Rings of Barred-Spiral Galaxies

Woo-Young Seo (Seoul National University)

[12:35-14:00] Lunch

Session 4 Secular Evolution

Chair: Juntai Shen

[14:00-14:25] Secular Evolution of Disk Galaxies

Bruce Elmegreen (IBM Research)

[14:25-14:50] From a Clump Cluster to a Disc Galaxy

Shigeki Inoue (Korea Astronomy and Space Science Institute)

[14:50-15:15] Radial Migration in Spiral Galaxies

Rok Roskar (University of Zurich)

[15:15-15:30] Core Creation in Galaxies and Haloes via Sinking Massive Objects

Tobias Goerdt (UA Madrid)

[15:30-16:00] Coffee Break

[16:00-16:15] Bars in Disk Galaxies: Spin, Gas Content and Environment

Bernardo Cervantes-Sodi (KIAS)

[16:15-16:30] Disk Galaxies of the Local Group: Dynamics from HST Proper Motion Studies

Sangmo Sohn (Space Telescope Science Institute)

[16:30-16:45] Gas Dynamics in High-Redshift Galaxies

Dominik Riechers (Cornell University)

[16:45-17:10] Intriguing Kinematics of the Globular Clusters in the Giant Disk Galaxy M31

Myung Gyoon Lee (Seoul National University)

[17:10-17:35] Bayesian Spectroscopy, Stellar Parameters and the Galactic Disc
Ralph Schönrich (University of Oxford)

[18:30-21:00] Banquet

Oct. 23, Wednesday (Day 3)

Session 5	Gaseous Component	Chair: Keiichi Wada
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[09:00-09:25] Gas Accretion: Formation and Evolution of Disks
Filippo Fraternali (University of Bologna)

[09:25-09:50] On the Nature of Star Forming Regions as a Function of Galactic Dynamics
Florent Renaud (CEA-Saclay, Paris)

[09:50-10:05] Hydrodynamical Simulations of the Barred Spiral Galaxy NGC 1097
Lien-Hsuan Lin (ASIAA)

[10:05-10:30] Coffee Break

[10:30-10:55] Gas Dynamical Processes: Star Formation and AGN Fueling and Feedback
Francoise Combes (Observatoire de Paris)

[10:55-11:20] Gas Dynamics of Galaxies under ICM Pressure
Aeree Chung (Yonsei University)

[11:20-11:35] The Influence of Ram Pressure on the Evolution of Tidal Dwarf Galaxies
Rory Smith (Universidad de Concepcion)

[11:35-12:20] Lunch

[12:20-] Afternoon Tour

Oct. 24, Thursday (Day 4)

Session 6	Milky Way	Chair: Jerry Sellwood
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[09:00-09:25] Kinematics and Composition of the Galactic Bulge
Michael Rich (UCLA)

[09:25-09:40] Kinematic Features of a Milky Way Bulge Model
Yujing Qin (Shanghai Astronomical Observatory, CAS)

[09:40-10:05] Mapping the Milky Way Structure with Masers
Ye Xu (PMO)

[10:05-10:30] Inward Gas Migration from the Galactic Disk to the Vicinity of the Central Black Hole
Sungsoo Kim (Kyung Hee University)

[10:30-11:00] Coffee Break

[11:00-11:25] New results on the Structure of the Galactic Stellar Disk
Robert Benjamin (University of Wisconsin)

[11:25-11:40] GALAH View of the Galactic Disk
Gayandhi De Silva (AAO)

[11:40-12:05] The Chemo-dynamical Structure of the Milky Way
Jo Bovy (Institute for Advanced Study)

[12:05-12:20] The Impact of LAMOST and Other Major Surveys on the Kinematic Understanding of the Solar Volume
Martin Smith (Shanghai Astronomical Observatory)

[12:20-14:00] Lunch

Session 7	Modeling	Chair: Kartik Sheth
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[14:00-14:25] Made-to-measure and Dynamical Modeling
Ortwin Gerhard (Max Planck Institute for Ex. Physics)

[14:25-14:50] Fitting the Kinematics of Disk Galaxies: Towards a Model-Based Approach
Kristine Spekkens (Royal Military College of Canada)

[14:50-15:05] The Stellar Velocity Ellipsoid and the Multi-Component Stability of Galaxy Disks
Kyle Westfall (Kapteyn Astronomical Institute)

[15:05-15:20] Tomographic Study of Buckled Bar Models
Zhao-Yu Li (Shanghai Astronomical Observatory)

[15:20-15:50] Coffee Break

[15:50-16:15] Torus Modeling
Paul McMillan (Oxford University)

[16:15-16:30] Modeling the Spatially Resolved Star Formation History and Radial Flows in CALIFA Disk Galaxies
Bruno Jungwiert (Astronomical Institute ASCR, Prague)

[16:30-17:00] Meeting Summary
Bruce Elmegreen (IBM Research)

Posters

- [P-1] Are Star Clusters in the Bars and Nuclear Rings of Disk Galaxies Special?
In Sung Jang (Seoul National University)
- [P-2] Construction of Global Magnetic Field Structure Model in Disk Galaxies with Three Dimensional Magnetohydrodynamic Simulations: Effects of Steady Spiral Arms
Nakamura Sho (Tohoku University)
- [P-3] Correlations of Disc Structural Parameters of Early Type Galaxies with Ionised Gas
Dhanya Joseph (University of Calicut)
- [P-4] Dependence of Barred Galaxy Fraction on Galaxy Properties and Environment
Gwang-Ho Lee (Seoul National University)
- [P-5] Do Bars Trigger Activity in Galactic Nuclei?
Gwang-Ho Lee (Seoul National University)
- [P-6] Recent Star Formation History of M31 and M33
Yongbeom Kang (Korea Astronomy and Space Science Institute)
- [P-7] Specific Angular Momentum Distribution of Disk Galaxies
Ji Hoon Kim (Seoul National University)
- [P-8] The Influence of Shear Motion on Giant Molecular Associations in Spiral Galaxies
Yusuke Miyamoto (Ibaraki University)
- [P-9] The Structure and Kinematics of the Milky Way from Parallaxes of High Mass Star Forming Regions
Jingjing Li (Purple Mountain Observatory)