

MARAC 2018

Friday, April 13, 1:00 – 6:00

Miller Nichols Learning Center (= the library)

REGISTRATION: 1:00 – 1:30

Session I 1:30 – 3:00

1:30 – 1:45

The Mechanism Which Causes Asteroids to Tumble

Annett, Clarence H., The Prairie Research Center, Kansas City

1:45 – 2:00

Modeling Rotation States and Light Curves of Rocket Bodies in Low Earth Orbit

Ojakangas, Gregory W., Drury University

2:00 – 2:15

Fundamental Milky Way Parameters

Camarillo, Tia; Ratra, Bharat; Dredger, Pauline, Kansas State University

2:15 – 2:30

Massive and Distant Clusters of WISE Survey (MaDCoWS)

Brodwin, Mark, on behalf of the MaDCoWS Collaboration

2:30 – 2:45

Dependence of AGN Activity on Halo Mass and Redshift in the SPT-SZ Cluster Survey

Floyd, Benjamin; Brodwin, Mark, University of Missouri - Kansas City

2:45 – 3:00

The Effect of Local Environment on the Size of Star-Forming Disks

Rudnick, Gregory, University of Kansas

BREAK: 3:00 – 3:30

SESSION II 3:30 – 4:45

3:30 – 3:45

Identifying Distant Galaxy Clusters Using Dust-obscured galaxies as Signposts at Redshift $> \sim 1.3$

Saha, Ripon; Brodwin, Mark, University of Missouri-Kansas City

3:45 – 4:00

Synergy of WISE and SDSS in Stripe 82

Musin, Marat, University of Missouri-Columbia

4:00 – 4:15

Stellar Mass Fractions of Infrared-Selected Galaxy Clusters at $z \sim 1$

Decker, Bandon; Brodwin, Mark, University of Missouri-Kansas City

4:15 – 4:30

HaloSat: An X-ray Analysis of the Halo of the Milky Way

LaRocca, Daniel; Kaaret, Philip, University of Iowa

4:30 – 4:45

Measuring X-ray Binary Accretion State Distributions in Extragalactic Environments using XMM-Newton

West¹, Lacey; Lehmer¹, Bret; Yukita², Mihoko; Hornschemeier³, Ann E.; Ptak³, Andrew; Wik⁴, Daniel R.; Zezas⁵, Andreas, University of Arkansas¹, Johns Hopkins University², NASA/GSFC³, University of Utah⁴, Crete⁵

BREAK: 4:45 – 5:00

SESSION III 5:00 – 6:00

5:00 – 5:15

Actively Encouraging Learning and Degree Persistence: How to Facilitate Interactive Engagement in Advanced Astro Courses

McIntosh, Daniel H., University of Missouri-Kansas City

5:15 – 5:30

Quantifying and Reducing Light Pollution

*Gokhale¹, Vayujeet; Caples², David; Herdman¹, Ashley; Goins¹, Jordan; Wren¹, Emily
Truman State University¹, Moberly Area Community College²*

5:30 – 5:45

Mass Distribution and Bar Formation in Growing Disk Galaxy Models

Berrier¹, Joel; Sellwood², J.A., University of Nebraska-Kearney¹, Steward Observatory¹

5:45 – 6:00

A Tale of Two Sides of the Star Formation Histories of Dwarf Galaxies beyond the Local Universe: bursts and quenching

Guo, Yicheng, University of Missouri-Columbia

SATURDAY APRIL 14, 2018 9:00 – 5:00

Miller Nichols Learning Center (= the library)

REGISTRATION: 9:00 – 9:30

Session IV 9:30 – 11:00

9:30 – 9:45

Multi-filter Photometric Analysis of Six W Ursae Majoris (W UMa) type Eclipsing Binary Stars

Akiba, Tatsuya; Neugarten, Andrew; Gokhale, Vayujeet, Truman State University

9:45 – 10:00

GALEX Absolute Calibration and Extinction Coefficients Based on White Dwarfs

Wall¹, Renae E.; Kilic¹, Mukremin; Rolland², Benoit; Genest-Beaulieu², Cynthia; Bergeron², P.; Gianninas¹, A. University of Oklahoma¹, Universite de Montreal²

10:00 – 10:15

Measuring Cosmological Parameters of the Tilted Flat and the Non-Flat Λ CDM Inflation Models from the Recent Observational Data

Park^{1,2}, Chan-Gyung; Ratra², Bharat, Chonbuk National University¹, Kansas State University²

10:15 – 10:30

Dark Energy Constraints from Hubble Rate and Baryon Acoustic Oscillation Data

Ryan¹, Joseph; Dosh², Sanket; Ratra¹, Bharat, Kansas State University¹, Indian Institute of Technology Bombay²

10:30 – 10:45

Hubble Parameter and Baryon Acoustic Oscillation Measurement Constraints on Cosmology Parameters

Yu, Hai, Kansas State University

BREAK: 10:45 – 11:15

SESSION V

11:15 – 12:15 INVITED TALK

Dr. Claudia Scarlata

Results from the WFC3 IR Spectroscopic Parallel Survey

LUNCH 12:15 - 1:30

SESSION VI 1:30 – 3:00

1:30 – 1:45

TeV Gamma-Rays from the Pulsar Wind Nebula DA495

Wilcox, Patrick, University of Iowa

1:45 – 2:00

Variability of the HD 163296 Protoplanetary Disk

Rich¹, Evan; Wisniewski¹, John; Fukagawa², Misato; Grady³, Carol; Sitko⁴, Michael, University of Oklahoma¹, Osaka University², Goddard Center for Astrobiology³, University of Cincinnati⁴

2:00 – 2:15

Planet Hunters: White Dwarf Edition

Dame¹, Kyra; Belard², Claudia; Kilic¹, Mukremin; Rest³, Armin; et al, University of Oklahoma¹, University of Leicester², The Johns Hopkins University³

2:15 – 2:30

Optical Confirmation of X-ray Selected Galaxy Clusters from the Swift AGN and Cluster Survey

Bhatiani, Saloni; Dai, Xinyu; Griffin, Rhiannon, University of Oklahoma

2:30 – 2:45

Non-parametric Star-formation Histories of Nearby and Deep-field Galaxies from LIGHTNING

Eufrazio, Rafael; Lehmer, Bret, University of Arkansas

2:45 – 3:00

Effects of Tidal Interactions and Mergers on the Star Formation of EDisCS Galaxies

Deger, Sinan; Rudnick, Gregory, University of Kansas

BREAK 3:00 – 3:30

SESSION VII 3:30 – 5:00

3:30 – 3:45

Illuminating on the Physical Properties of Tidal Debris with CANDELS: A New Feature Extraction Analysis

Mantha, Kameswara Bharadwaj; McIntosh, Daniel H.; Ciaschi, Cody; Evan, Rubyet; Fries, Logan; Landry, Luther, CANDELS Collaboration, University of Missouri-Kansas City & CANDELS institutions

3:45 – 4:00

Using Tidal Features in the Nearby Universe to Determine Dynamical History and Incidence of Gas-Rich and Gas-Poor Mergers

Fries, Logan; Mantha, Kameswara; McIntosh, Daniel, H., University of Missouri-Kansas City

4:00 – 4:15

Incidence of Tidal Features Hosted by Massive CANDELS Galaxies from $1 < z < 3$

Ciaschi, Cody; Mantha, Kameswara; Evan, Rubyet; Fries, Logan; Landry, Luther, University of Missouri-Kansas City

4:15 – 4:30

Spectral Energy Distribution Analysis of Major Mergers from the SDSS

Weston, Madalyn; McIntosh, Daniel, University of Missouri-Kansas City

4:30 – 4:45

Using CANDELS Visual Classification to Identify Massive Peculiar and Irregular Galaxy Targets for JWST

Landry, Luther; McIntosh, Daniel; Mantha, Kameswara; Ciaschi, Cody; Evan, Rubyet; Fries, Logan, University of Missouri-Kansas City

4:45 – 5:00

Mining CANDELS Data to Identify Massive Compact Targets from the Early Universe for JWST

Evan, Rubyet; Fries, Logan, University of Missouri-Kansas City

POSTERS

Li in Open Clusters: Cool Dwarfs in the Young, Subsolar Metallicity Cluster M35 (NGC 2168)

Anthony-Twarog¹, B. J.; Deliyannis², C. P.; Harmer³, D.; Lee-Brown¹, D.; Sun², Q.; Twarog¹, B. A., University of Kansas¹, Indiana University², NOAO³

Growth Rate in the Dynamical Dark Energy Models

Avsajanishvili, Olga; Arkhipova, Natalia ; Samushia, Lado; Kahniashvili, Tina, Ilia State University, Astro Space Center of the P.N. Lebedev Physical Institute, Kansas State University, Carnegie Mellon University

WIYN Open Cluster Study: Abundances in the Pre-Main Sequence Cluster IC 4665

Bogner¹, Benjamin M; Maderak¹, Ryan M; Deliyannis², Constantine P., Benedictine College¹, Indiana University²

Understanding Supermassive Black Hole Growth Mechanisms in the SSA 22 Protocluster

Bonine, Brett; Lehmer, Bret, University of Arkansas

Logic and Quantitative Reasoning in an Introductory Astronomy Class

Delgado, Jennifer, University of Kansas

Models of Interacting Supernovae: Understanding the Physics and Probing the Circumstellar Environment

DerKacy¹, James M.; Baron¹, E.; Hoeflich², Peter, University of Oklahoma¹, Florida State University²

X-ray Binaries within Young Stellar Populations

Ferrell, Andrew; Lehmer, Bret; Eufrazio, Rafael, University of Arkansas

A Physical Parameterization of the Evolution of X-Ray Binaries

Gilbertson, Woodrow; Lehmer, Bret; Eufrazio, Rafael, University of Arkansas

Correlated Variability of Molecular Masers in Massive Star Forming Regions

Lambert, Richard; Araya, Esteban, Western Illinois University

Estimating the Evolution of X-ray Binary Populations in Nearby Galaxies

Lehmer, Bret, University of Arkansas

Construction of a Laboratory for Simulation of Light Curves from Rotating Space Debris

Martin, Cale; Kaneko, Sage; Simms, Austin; Omair, Jasmine; Adams, Jaxon; Ojakangas, Gregory, Drury University

Estimations of Targets Reachable by North Korean Missiles

Medina, Michelle; Alcantara, Jose; Wood, Mark; Ojakangas, Gregory, Drury University

A New Code for Calculations of Two-Point Correlation Functions

Montero-Alcaraz, Gamaliel; Berrier, Joel, University of Nebraska-Kearney

Stunted Outbursts in Cataclysmic Variable UU AQR

Robertson, Jeff, Arkansas Tech University

Assessing the Calibration of Continuum and Spectral Line Interferometric Observations of a High-Mass Star-Forming Region

Sakib, Md Nazmus; Araya, Esteban, Western Illinois University

Disentangling 2 cm Formaldehyde Emission and Absorption in NGC7538

Shuvo, Onic Islam; Araya, Esteban D., Western Illinois University

The Precise Determination of the Number of Satellites around Luminous Red Galaxies

Townsend, Mindy; Rudnick, Gregory, University of Kansas