

ArAS Third Advanced School of Astrophysics (ArAS SfA-Adv3)

September 15-22, 2023

Arrival Friday, Sep 15, Excursion Sep 21 Or Departure Sep 22

Saturday (16 September)

Introduction to the large-scale structure of the universe and galaxy surveys I

07:30-09:00 Breakfast & Logistics (Hadia Selim - LOC Chair)

09:00-11:00 Registration

11:00-12:00 Opening Ceremony (ArAS President, NRIAG President, ArAS SfA Director, LOC Chair)

12:00-12:30 Break

12:30-14:30 Introduction to the large-scale structure of the universe and galaxy surveys, part I - Pr. Prada

14:30-16:00 Lunch

16:00-18:00 Introduction to measuring distances in the universe with Supernova, part I - Dr. Izzo

18:00-18:30 Poster session

18:30-20:00 Dinner

20:00-23:00 Observations using Kottamia Telescope

Sunday (17 September)

Introduction to the large-scale structure of the universe and galaxy surveys II

09:00-10:00 Introduction to the large-scale structure of the universe and galaxy surveys, part III- Pr. Prada

10:00-11:00 Introduction to measuring distance in the universe with Supernova, part II - Dr. Izzo

11:00-11:30 Break - Poster session

11:30-14:30 Practical session: Hands-on session on data analysis using galaxy

catalogues obtained from cosmological simulations - Pr. Prada

14:30-16:00 Lunch

16:00-18:00 Practical session: Hands-on session on data analysis using HST photometry data – Dr. Izzo

18:00-18:30 Poster session

18:30-20:00 Dinner

20:00-21:00 Group work

Monday (18 September)

Introduction to the large-scale structure of the universe and galaxy surveys III

09:00-10:00 Practical session: Hands-on session on data analysis using galaxy catalogues obtained from cosmological simulations - Pr. Prada

10:00-11:00 Spectral signature of shock waves in RR Lyrae stars - Dr. Sefiani

11:00-11:30 Break - Poster session

11:30-14:30 Practical session: Hands-on session on data analysis using HST photometry data – Dr. Izzo

14:30-16:00 Lunch

16:00-18:00 Practical session: Hands-on session on data analysis using HST photometry data – Dr. Izzo

18:00-19:00 Practical session: Spectral signature of shock waves in RR Lyrae stars - Dr. Sefiani

19:00-20:00 Dinner

20:00-22:00 Group work

Tuesday (19 September)

Galaxies: Morphology and Evolution I

09:00-10:00 Active Galactic Nuclei and SMBH in Galaxies - Dr. Priya Hasan

10:00-11:00 Theory session : Mass of Black Hole in Galaxies - Dr. Priya Hasan

11:00-11:30 Break - Poster session

11:30-14:30 Practical session: Hands-on session on finding the mass of Black Holes of AGN

14:30-16:00 Lunch

16:00-18:00 Practical session: Hands-on session on finding the mass of Black Holes of AGN

18:00-18:30 Poster session

18:30-20:00 Dinner

20:00-21:00 Group work

21:00-23:00 Observations using Kottamia Telescope

Wednesday (20 September)

Galaxies: Morphology and Evolution II

09:00-10:00 Quantifying Galaxy Morphology- Dr. Priya Hasan

10:00-11:00 Luminosity Profile Decomposition and GALFIT - Dr. Priya Hasan

11:00-11:30 Break - Poster session

11:30-14:30 Practical session: Hands-on session on using GALFIT to quantify Galaxy Morphology, part I

14:30-16:00 Lunch

16:00-18:00 Practical session: Hands-on session on using GALFIT to quantify Galaxy Morphology, part II

18:00-19:00 Closing Ceremony

19:00-20:00 Dinner

Thursday (21 September) Excursion

Friday (22 September) Departure