

48th Saas-Fee course: Black hole formation and growth

Monday, January 29, 2018

Lectures: Foundations of general relativity and black-holes (8:40 AM - 9:30 AM)

-Conveners: Neil Cornish

Lectures: Primordial black holes (9:30 AM - 10:20 AM)

-Conveners: Tiziana Di Matteo

Lectures: How do black holes accrete, accretion yields, importance of feedback, SMBH and galaxies (10:50 AM - 11:40 AM)

-Conveners: Andrew King

Lectures: The physics of gravitational waves (5:20 PM - 6:10 PM)

-Conveners: Neil Cornish

Lectures: BH and their role in re-ionization (6:10 PM - 7:00 PM)

-Conveners: Tiziana Di Matteo

Tuesday, January 30, 2018

Lectures: Accretion discs, Eddington limit (8:40 AM - 9:30 AM)

-Conveners: Andrew King

Lectures: Interferometric gravitational wave detectors, ground, space and pulsar timing (9:30 AM - 10:20 AM)

-Conveners: Neil Cornish

Lectures: The first quasars (10:50 AM - 11:40 AM)

-Conveners: Tiziana Di Matteo

Lectures: Binaries and transients (5:20 PM - 6:10 PM)

-Conveners: Andrew King

Lectures: Interferometric gravitational wave detectors, ground, space and pulsar timing (6:10 PM - 7:00 PM)

-Conveners: Neil Cornish

Wednesday, January 31, 2018

Lectures: The growth of the BH mass function, BH merger rates (8:40 AM - 9:30 AM)

-Conveners: Tiziana Di Matteo

Lectures: Spin evolution of SMBH, limits to growth (9:30 AM - 10:20 AM)

-Conveners: Andrew King

Lectures: Interferometric gravitational wave detectors, ground, space and pulsar timing (10:50 AM - 11:40 AM)

-Conveners: Neil Cornish

Lectures: The peak of the quasar phase in galaxies, the dormant, massive BH population (5:20 PM - 6:10 PM)

-Conveners: Tiziana Di Matteo

Lectures: Super-Eddington accretion, winds and interaction with surroundings, M - sigma relation (6:10 PM - 7:00 PM)

-Conveners: Andrew King

Thursday, February 1, 2018

Lectures: Gravitational wave signals from binary systems (8:40 AM - 9:30 AM)

-Conveners: Neil Cornish

Lectures: Quasars and Cosmology/large scale structure (9:30 AM - 10:20 AM)

-Conveners: Tiziana Di Matteo

Lectures: Episodic nature of feedback (10:50 AM - 11:40 AM)

-Conveners: Andrew King

Lectures: Quasars LFs and clustering, AGN feedback and its effects on DM power spectrum (5:20 PM - 6:10 PM)

-Conveners: Tiziana Di Matteo

Friday, February 2, 2018

Lectures: Gravitational wave data analysis (8:40 AM - 9:30 AM)

-Conveners: Neil Cornish

Lectures: Transition to energy-driven outflow, large-scale outflows (9:30 AM - 10:20 AM)

-Conveners: Andrew King

Lectures: Cosmological Simulations of Structure formation: galaxies and BHs in large volumes (10:50 AM - 11:40 AM)

-Conveners: Tiziana Di Matteo

Lectures: Gravitational wave data analysis (5:20 PM - 6:10 PM)

-Conveners: Neil Cornish

Lectures: Feedback effects on star formation, SMBH - bulge mass relation, radiation feedback (6:10 PM - 7:00 PM)

-Conveners: Andrew King

Saturday, February 3, 2018

Lectures: Astrophysical rate and population constraints (8:40 AM - 9:30 AM)

-Conveners: Neil Cornish

Lectures: Open problems (9:30 AM - 10:20 AM)

-Conveners: Andrew King