

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

Monday 29 January 2018

Lectures: Foundations of general relativity and black-holes (08:40 - 09:30)

-Conveners: Neil Cornish

Lectures: Primordial black holes (09:30 - 10:20)

-Conveners: Tiziana Di Matteo

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

-Conveners: Andrew King

Lectures: The physics of gravitational waves (17:20 - 18:10)

-Conveners: Neil Cornish

Lectures: BH and their role in re-ionization (18:10 - 19:00)

-Conveners: Tiziana Di Matteo

Tuesday 30 January 2018

Lectures: Accretion discs, Eddington limit (08:40 - 09:30)

-Conveners: Andrew King

Lectures: Interferometric gravitational wave detectors, ground, space and pulsar timing (09:30 - 10:20)

-Conveners: Neil Cornish

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

-Conveners: Tiziana Di Matteo

Lectures: Binaries and transients (17:20 - 18:10)

-Conveners: Andrew King

Lectures: Interferometric gravitational wave detectors, ground, space and pulsar timing (18:10 - 19:00)

-Conveners: Neil Cornish

Wednesday 31 January 2018

Lectures: The growth of the BH mass function, BH merger rates (08:40 - 09:30)

-Conveners: Tiziana Di Matteo

Lectures: Spin evolution of SMBH, limits to growth (09:30 - 10:20)

-Conveners: Andrew King

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

-Conveners: Neil Cornish

Lectures: The peak of the quasar phase in galaxies, the dormant, massive BH population (17:20 - 18:10)

-Conveners: Tiziana Di Matteo

Lectures: Super-Eddington accretion, winds and interaction with surroundings, M - sigma relation (18:10 - 19:00)

-Conveners: Andrew King

Thursday 1 February 2018

Lectures: Gravitational wave signals from binary systems (08:40 - 09:30)

-Conveners: Neil Cornish

Lectures: Quasars and Cosmology/large scale structure (09:30 - 10:20)

-Conveners: Tiziana Di Matteo

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

-Conveners: Andrew King

Lectures: Quasars LFs and clustering, AGN feedback and its effects on DM power spectrum (17:20 - 18:10)

-Conveners: Tiziana Di Matteo

Friday 2 February 2018

Lectures: Gravitational wave data analysis (08:40 - 09:30)

-Conveners: Neil Cornish

Lectures: Transition to energy-driven outflow, large-scale outflows (09:30 - 10:20)

-Conveners: Andrew King

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

-Conveners: Tiziana Di Matteo

Lectures: Gravitational wave data analysis (17:20 - 18:10)

-Conveners: Neil Cornish

Lectures: Feedback effects on star formation, SMBH - bulge mass relation, radiation feedback (18:10 - 19:00)

-Conveners: Andrew King

Saturday 3 February 2018

Lectures: Astrophysical rate and population constraints (08:40 - 09:30)

-Conveners: Neil Cornish

Lectures: Open problems (09:30 - 10:20)

-Conveners: Andrew King