

Edinburgh massive black hole spin workshop 2026

	[Up to date as of 20th April]				
	Tuesday	Wednesday	Thursday	Friday	
	21/04/2026	22/04/2026	23/04/2026	24/04/2026	
09:00	Welcome			[Chair: Joanna Piotrowska]	
09:10	[CHAIR: Massimo Dotti] Matthew Liska A review of black hole spin on accretion disc scales from simulations	[Chair: Jake Rule] Laura Brenneman A review of measuring black hole spin from X-ray observations		Martin Bourne Supermassive black hole binary dynamics, growth and spin alignment in gas-rich circumbinary discs	
09:20				Sophie Koudmani A unified accretion disc model for supermassive black holes in galaxy formation simulations	
09:30				Chair [Lee Whitaker]	
09:40					
09:50	Jake Rule Simulating the Plunging Region: Testing Analytic Models and the Spin-Stress Relation	Samir Mandal [remote] Breaking the Spin-Accretion Degeneracy: Joint UV–X-ray Spectral Modelling of Supermassive Black Holes	Konstantinos Kritos The spin of the first seeds constrains early gas accretion growth	Kasar Profit Simulating the multi-messenger signatures of spinning black hole mergers	
10:00					
10:10	Alessandro Trinca Multi-regime accretion disc model for black hole growth and spin evolution in cosmological simulations	Athulya Menon Madathil Pottayil Constraining black hole spin in PG_1535+547 amidst complex multi-layered absorption	Claire Larson Super-Eddington Growth of Supermassive Black Holes: The First Billion Years	Coffee	
10:20					
10:30					
10:40	Coffee	Coffee	Coffee	A discussion of black hole spin evolution on binary scales [II] [Francesco Bollati and Martin Bourne]	
10:50					
11:00	Eleni Antonopoulou [Remote] Accretion and energetic flares near supermassive black holes	Eugenio Bottacini Spins and Growth of Supermassive Black Holes: Observational Constraints at Low- and High-Redshift	Markos Polkas Tidal Disruption Events spinning down Intermediate Mass Black Holes		
11:10					
11:20	Discussion on black hole spin evolution on accretion disc scales [Alessandro Trinca & Ricarda Beckmann]	Christopher Reynolds Black hole spin measurements and constraints on ultralight axion-like particles	Vid Irsic The impact of superradiance on the spin evolution of variably accreting massive black holes		
11:30					
11:40			Joanna Piotrowska The State of X-ray Reflection Modelling: Assumptions, Limitations, and the Road Ahead	Massimo Dotti Testing MBH evolution models against spin magnitude and direction observations	Conclusions and goodbye
11:50		Javier Garcia New advances in X-ray Reflection Modeling			
12:00					
12:10			Lunch		
12:20					
12:30					
12:40					
12:50	Lunch	Lunch			
13:00					
13:10					
13:20			A discussion of understanding black hole spin evolution using cosmological samples [II] [Marko Polkas and Vid Irsic]		
13:30	[Chair: Athulya Pottayil] Margherita Giustini A review of black hole spin from transient phenomena	A discussion on measuring black hole spin from X-ray observations [Chris Reynolds and Eugenio Bottacini]			
13:40					
13:50					
14:00	Iaria Ruffa Relative orientation between radio jets and circumnuclear cold gas discs: a 3D observational perspective with ALMA and JVLTA				
14:10					
14:20	Shashwat Singh Disrupted stars and falling compact objects: Combining multi-messenger observations to constrain the population of MBH	[Chair: Kostas Kritos] Ricarda Beckmann The evolving spin of massive black holes from the NewHorizon simulation + a review of understanding black hole spin evolution using cosmological samples	[Chair: Shashwat Singh] Daive Gerosa A review of black hole spin evolution on binary scales		
14:30					
14:40					
14:50	Coffee		Coffee		
15:00					
15:10	Yan Wang Characterizing Binary Black Holes with Space-based Detectors: Hierarchical Search for Massive and Stellar-mass Binary Systems	Coffee	Antti Rantala SMBH spin evolution by tidal disruption events in nuclear star clusters		
15:20					
15:30	Kazu Akiyama Spin Measurement with the Black Hole Explorer Mission	Olmo Piana Modelling SMBH Spin at High Resolution	Francesco Bollati The Impact of AGN Feedback and Spin on the Evolution of Massive Black Hole Binaries		
15:40					
15:50	Stefan Gillessen A star sensitive to the spin of Sgr A*	Lee Whitaker The Spin Evolution of Massive Black Holes Across Cosmic Time	Andres Escala SMBH Binaries Embedded in Gaseous Circumbinary Disks: Spin Evolution in Radiation-Hydrodynamic Simulations.		
16:00					
16:10					
16:20	A discussion of understanding BH spin from observation other than X-rays [Yan Wang and Kazu Akiyama]	A discussion of understanding black hole spin evolution using cosmological samples [I] [Olmo Piana and Sophie Koudmani]	A discussion of black hole spin evolution on binary scales [I] [Antti Rantala and Massimo Dotti]		
16:30					
16:40					
16:50					
17:00		Martin Gaskell [REMOTE] The observed direction of rotation of supermassive black holes is unrelated to the direction of rotation of the host galaxy			
17:10					
17:20					
		Conference meal (19:30)			