

Schedule for Loops' 26

2026/5/24				
Time	Event			
14:00-21:00	Registration			
18:00-21:00	Reception (Conference Center 1F)			
2026/5/25				
Time	Title	Speaker	Chair	
8:30-9:00	Opening Remarks		Tao Zhu	
9:00-9:10	Taking Photos			
9:10-9:50	Perspectives on Quantum Gravity	Abhay Ashtekar	Anzhong Wang	
9:50-10:30	Loop Quantum Gravity and a semi-stable Planck mass particle	Carlo Rovelli		
10:30-11:00	Coffee Break			
11:00-11:40	Infinite-free Gravitational Quantum Field Theory for Hyper-Unification and Loop Regularization Method	Yue-Liang Wu	Ronggen Cai	
11:40-12:20	Covariance in Spherically Symmetric Effective Models and Black Holes	Yongge Ma		
12:20-14:00	Lunch			
	[Canonical LQG] Chair: Chao Zhang Room A		[Covariant LQG] Chair: Fu-Wen Shu Room B	
	Title	Speaker	Title	Speaker
14:00-14:15	Block-by-block dynamics for Loop Quantum Gravity	Etera Livine	Looking for Regge equations in spinfoam theories	Pietro Dona
14:15-14:30	A Chern-Simons phase space on interfaces of 4D gravity	Simon Langenscheidt (Postdoc)	The structure of the continuum limit of spinfoams	Fabio Mele (Postdoc)
14:30-14:45	Quantum anomaly triggers the violation of scaling laws in gravitational system	Ya-Peng Hu	Diffeomorphism Symmetry in the Path Integral of the Conformal Particle	Hal Haggard
14:45-15:00	Hamiltonian renormalisation of the $U(1)^3$ model for 3+1 quantum gravity	Melissa Rodriguez Zarate (Student)	Bridging Quantum and Semiclassical Volume: A Study of Coherent State Matrix Elements in Loop	Haida Li (Postdoc)

			Quantum Gravity	
15:00-15:15	Action and solutions to the symmetric Lorentzian dynamical constraint in canonical loop quantum gravity	Thiago Lucena de Macedo Guedes (Postdoc)	How big is a ball of space? Counting quantum gravity states from a Lorentzian path integral	Jose Padua-Arguelles (Student)
15:15-15:30			Tunneling-like processes in spinfoam theories	Gowrisankar Sreeram (Student)
15:30-16:00	Coffee Break			
	[Canonical LQG] Chair: Xiao-Mei Kuang Room A		[Covariant LQG] Chair: Wei-Jia Li Room B	
	Title	Speaker	Title	Speaker
16:00-16:15	Canonical Analysis and Constraint Equations of the Holst Model in Lagrangian Formalism	Roberto Ciccarelli (Student)	Quantum information structure of spin networks	Grzegorz Czelusta (Student)
16:15-16:30	Coarse-graining LQG: Kinematics	Martin Zei (Student)	Causal spinfoam vertex for 4d Lorentzian quantum gravity	Chaosong Chen (Student)
16:30-16:45	Coarse-grained model for canonical LQG	Mehdi Assanioussi (Student)	Spin Networks of Quantum Channels	Bartosz Grygielski (Student)
16:45-17:00	TBA	Wolfgang Wieland	Effective spherical symmetry in LQG: The path integral approach	Juan Carlos Del guila Rodrguez (Postdoc)
18:00-20:00	Dinner			
2026/5/26				
Time	Title	Speaker	Chair	
9:00-9:40	LQG numerics using machine learning	Hanno Sahlmann	Yu-Xiao Liu	
9:40-10:20	Gravitationally Induced Decoherence: A Relational Perspective on Open Quantum Systems	Kristina Giesel		
10:20-10:40	Coffee Break			
10:40-11:20	Effective spin foams and their effective continuum dynamics (online)	Bianca Dittrich	Yi Ling	
11:20-12:00	Quantum geometry and cosmic puzzles	XiangDong Zhang		
12:00-13:30	Lunch			
	[Black Holes] Chair: Gao-Ping Long Room A		[Cosmology] Chair: Wen-Di Guo Room B	

	Title	Speaker	Title	Speaker
13:30-13:45	Covariant Dynamics from Static Spherically Symmetric Geometries	Cong Zhang	Probing the Quantum Bounce with Krylov Complexity (online)	Parampreet Singh
13:45-14:00	Expansion operators in spherically symmetric loop quantum gravity	Xiaotian Fei (student)	Loop Quantum Gravitational Signatures via Love Numbers	Meysam Motaharfar (student)
14:00-14:15	Recent Phenomenological Studies of Lorentz Violation in Loop Quantum Gravity	Hao Li	Reheating in Loop Quantum Cosmology	Yogesh
14:15-14:30	Superradiant instability of area-quantized Kerr black hole with discrete reflectivity	Yun-Long Zhang	Stable initial conditions and analytical investigations of cosmological perturbations in a modified loop quantum cosmology	Rui Pan (student)
14:30-14:45	Lorentz symmetry breaking in photon/vector theories	Zhi Xiao	Quantum Damping of Cosmological Shear: A New Prediction from Loop Quantum Cosmologies	Wencong Gan
14:45-15:00	Effective stellar evolution beyond shell-crossing singularities	Francesco Fazzini (Postdoc)	Generation of primordial magnetic fields in loop quantum cosmology	Sreenath Vijayakumar
15:00-15:15	Spin-statistics connection in loop quantum gravity	Bekir Baytaş	Parametrization of the primordial power spectrum in loop quantum cosmology	Antonio Vicente-Becerril (student)
15:15-15:30	Energy extraction from loop quantum black holes and quantum gravity effects with astrophysical insights	Sanjar Shaymatov	Effects of the ekpyrotic mechanism on inflationary phase in loop quantum cosmologies	Christain Brown
15:30-16:00	Coffee Break			
	[Black Holes] Chair: Zhi Xiao Room A		[Cosmology] Chair: Yun-Long Zhang Room B	
	Title	Speaker	Title	Speaker
16:00-16:15	Black Hole Modes and GW Flux in LQG	Changkai Chen (student)	Causal-net condensation: a categorical formulation of Baez construction	Xuexing Lu
16:15-16:30	Effective LTB models and the formation of shell-crossing singularities	Eric Rullit (student)	Scaling-based quantization of spacetime microstructure	Weihu Ma
16:30-16:45	Apparent Horizons and Quasi-Local Mass in Evaporating Black Holes	Jonas Neuser (Postdoc)	Isolated horizons in the Holst action	Yanh Vissuet (student)
16:45-17:00	A loop quantization of the marginally bound Lemaître-Tolman-Bondi dust model	Luca Cafaro (student)	Energy Conditions in $(n + 1)$ -Dimensional LQC	You Ding
17:00-17:15			Quantum Big Bounce in Wheeler-DeWitt Scattering Theory: LQC-like and Ekpyrotic	Simone Lo Franco (student)

			transitions	
18:30-20:00	Celebrating LQG: 40 Years (1986–2026) • Awards • Banquet (Venue: Lake View Dining Room, 3F)			
2026/5/27				
Time	Title	Speaker	Chair	
9:00-9:40	Energy cost of purification of Hawking radiation	Ivan Agullo	Lixin Xu	
9:40-10:20	Asymptotically safe gravity and its phenomenology	Astrid Eichhorn		
10:20-10:40	Coffee Break			
10:40-11:10	Canonical LQG/Beyond Panel		Hanno Sahlmann	
11:10-11:40	Spin Foam Panel		Hal Haggard	
11:40-12:00	Young Researchers Working Group (YRWG)		Hongguang Liu	
12:00-14:00	Lunch			
14:00-18:00	Free Afternoon/Soccer Tournament			
19:00-21:00	Public Talk (Quantum gravity, black holes and dark matter by Prof. Carlo Rovelli, Cricket Hall at ZJUT)			
2026/5/28				
Time	Title	Speaker	Chair	
9:00-9:40	Causality in Spinfoams	Eugenio Bianchi	Qi-Yuan Pan	
9:40-10:20	Asymptotics in Loop Quantum Gravity: Covariant and Canonical Perspectives	Hongguang Liu		
10:20-10:40	Coffee Break			
10:40-11:20	Emergence of cosmic structure from Planckian discreteness	Alejandro Perez	You Ding	
11:20-12:00	Phenomenology of modified loop quantum cosmology	Bao-Fei Li		
12:00-14:00	Lunch			
	[Boundaries, symmetris and quantum foundations] Chair: WenCong Gan Room A		[Black holes and Cosmology] Chair: Sepideh Bakhoda Room B	
	Title	Speaker	Title	Speaker

14:00-14:15	New Physics from Ultra-High Energy Cosmic Particles	Bo-Qiang Ma	Hidden superspace symmetries in cosmological models	Daniele Oriti
14:15-14:30	Quantum reference frames and relational entanglement entropy	Francesco Sartini (Postdoc)	Anomaly in canonical semiclassical gravity	Viqar Husain
14:30-14:45	Quantum Geometry Effects in Quantum Field Theory: Hamiltonian constraint Generates Gravity-Matter Entanglement	Gaoping Long	Regular ultracompact objects as polymerized vacuum solutions	Ioannis Soranidis (Postdoc)
14:45-15:00	Some new developments on the Casimir energy on branes	Hongbo Cheng	A 3BF model of quantum gravity coupled to Standard Model	Marko Vojinovic
15:00-15:15	Null infinity as SU(2) Chern–Simons theories and its quantization	Hongwei Tan	Gauge theory approach to Teleparallel Gravities	Morgan Le Delliou
15:15-15:30	Emergence of Weyl-spinor gravity from a topological theory	Oleksandra Hrytseniak (student)	Weyl-transverse gravity with boundaries	Salvatore Ribisi (Postdoc)
15:30-15:45	Thermodynamics and phase transition of κ -deformed Schwarzschild-AdS black hole	Vishnu Rajagopal (Postdoc)	What the Event Horizon Telescope Can Tell Us About Quantum Gravity	Shafqat UI Islam (Postdoc)
15:45-16:00				
16:00-16:20	Coffee Break			
	[Boundaries, symmetris and quantum foundations] Chair: Zi-Chao Lin Room A		[Black holes and Cosmology] Chair: Hongwei Tan Room B	
	Title	Speaker	Title	Speaker
16:20-16:35	Global Poisson-Lie Symmetries in 2D Dilaton Gravity & LQG	Christopher Pollack (student)	Probing thermodynamic phase transitions cyan via timelike particle dynamics around a magnetic AdS black hole	Ali Rana Hasnain (Postdoc)
16:35-16:50	Unfreezing dynamics: on the resolution of the problem of time in the quantum mechanics of a closed system	Juan Manuel Diaz (student)	Gauge invariant Hamiltonian formalism for perturbed nonrotating black holes	Andrés Mínguez-Sánchez (student)
16:50-17:05	Investigating Gravitationally Induced Decoherence Models in Neutrino Oscillations: Properties and Implications	Roman Kemper (student)	QRcoupling.jl: A New Framework for q-Deformed Amplitudes via Deferred Cyclotomic Representation	Seth Asante (Postdoc)
17:05-17:20	Effective Regge-Wheeler equations of a hybrid loop quantum black hole	Alvaro Torres-Caballeros (student)	Emergent scalar field dynamics from Group Field Theory cosmology	Federico Greco (student)
17:20-17:35	Asymptotic Symmetries of the Holst Action at Spatial Infinity: Including Supertranslations	Sepideh Bakhoda (Postdoc)	Collective excitations of a group field theory condensate	Andrea Calcinari (Postdoc)
17:35-17:50			Emergent dark sector from Group Field Theory	Pietro Pellecchia (student)
17:50-18:05			Schrödinger Symmetry in the Black Hole Minisuperspace with Matter Field	Taishi Sano (student)
18:05-18:20			Covariant Effective Dynamics in Loop Quantum Kaluza–Klein Cosmology	Shengzhi Li (student)

18:20-19:30	Dinner		
19:30-20:30	Assembly Meeting of ISLQG		
2026/5/29			
Time	Title	Speaker	Chair
9:00-9:40	Master functions and hybrid quantization of perturbed black holes (online)	Guillermo Mena Marugan	Baofei Li
9:40-10:20	An ultraviolet fixed point of Lorentzian spinfoam quantum gravity (online)	Muxin Han	
10:20-10:40	Coffee Break		
10:40-11:20	Loop Quantum Gravity at the Speed of Light	Wolfgang Wieland	Cong Zhang
11:20-12:00	Spinfoam with cosmological constant	Qiaoyin Pan	
12:00-14:00	Lunch		
	Title	Speaker	Chair
14:00-14:40	Quantum black holes in a quantum universe	Francesca Vidotto	Sai Wang
14:40-15:20	Quantum Gravity and Emergent Cosmology: A Group Field Theory Perspective	Luca Marchetti	
15:20-15:40	Coffee Break		
15:40-16:10	LQCs Pannel		
16:10-16:40	LQBHs Pannel		
16:50-17:20	Summary(Abhay Ashtekar)		Anzhong Wang
17:20-17:30	Closing Remarks		Hanno Sahlmann
18:00-20:00	Dinner		