

Program

Friday, March 29th 2019

8:30–9:00		Registration	
9:00–9:10		Welcome remarks	
9:10–10:10	KL	Beverly Berger Stanford	The Mystery of Expanding Galileo
10:10–10:30		Coffee Break	
10:30–10:48	CT	Steven Carlip UC Davis	How to hide a cosmological constant
10:50–11:08	ST	Diandian Wang UC Santa Barbara	Can one create a traversable wormhole?
11:10–11:28	ST	Joshua Leiter USU	Codimensions, curvature, & coding
11:30–11:48	ST	Alankrita Priya ASU	Contributions to the one-loop partition function in a Schwarzschild black hole background in the large dimension limit
11:50–12:08	ST	Gabriel Trevino UC Santa Barbara	Strong-field deviations from general relativity via gravitational waves
12:10–12:28	CT	Chad Middleton Colorado Mesa	A higher-dimensional alternative to scalar-field inflationary theory
12:30–14:00		Lunch Break	
14:00–14:18	CT	Ellery Ames Humboldt State	Fun features of toroidal self-gravitating kinetic matter
14:20–14:38	ST	Hyun Lim BYU	Well-posed initial value problem for quadratic gravity
14:40–14:58	ST	Taha Malik UTSA	Proof of the quantum null energy condition for fermions
15:00–15:18	ST	Heather Mentzer LMU	Thermodynamics of charged uncertainty principle black holes
15:20–15:50		Coffee Break	
15:50–16:08	CT	Praxitelis Ntotos USU	Entropy extremization for AdS-5 BPS black holes
16:10–16:28	ST	Michael Schultz USU	Gravitational anomalies and the universal bundle of elliptic curves
16:30–16:48	CT	Andreas Malmendier USU	F-theory/heterotic string duality in eight dimensions

Explanation: KL: Keynote Lecture, CT: Contributed Talk, ST: Student Talk.
All talks are taking place in **Huntsman Hall 222, USU**.

Saturday, March 30th 2019

9:00–10:00	KL	Dan Knopf UT Austin	Twenty years of mathematics – and friendship – with Jim Isenberg
10:00–10:30	Coffee Break		
10:30–10:48	CT	Jim Wheeler USU	Systematic examination of gravitational gauge theories
10:50–11:08	ST	Mubarak Ukashat USU	Graviweak theory in biconformal space
11:10–11:28	ST	Davis Muhwezi USU	Yang-Mills sources for biconformal gravity
11:30–11:48	ST	Eugene Hwang USU	Classification of isometry algebras for solutions to the Einstein equations
11:50–12:08	ST	Zhencheng Wang UC Santa Barbara	Restricted Maximin surfaces and HRT in generic black hole spacetimes
12:10–12:28	ST	Jacob Fields BYU	Relativistic hydrodynamics with wavelet adaptive multi-resolution
12:30–14:00	Lunch Break		
14:00–14:18	ST	Milad Haddadi Washington State	Evolution of black hole-neutron star post-merger accretion disk
14:20–14:38	ST	Jacob Cifre USU	A near horizon extreme binary black hole geometry
14:40–14:58	ST	Milinda Fernando University of Utah	Simulations of binary black hole intermediate-mass-ratio inspirals
15:00–15:18	CT	Maria Rodriguez USU	Binary Black Hole Shadows
15:20–15:50	Coffee Break		
15:50–16:08	CT	Sharmanthie Fernando Northern Kentucky	Black holes as heat engines
16:10–16:28	CT	Oscar Varela USU	Corrections to black hole entropy
16:30–16:48	CT	Charles Torre USU	Spacetime groups
17:00–17:10	Award for Best Student Presentation		

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