

String Phenomenology 2023 - IBS

Plenary [IBS Science & Culture Center (2F Auditorium)]

Time	Mon 3	Tue 4	Wed 5	Thu 6	Fri 7
8:30	Opening Remarks		Registration		
Chair	McAllister	K. Lee	Yi	Cvetic	Wrased
9:00	Hebecker	Heckman	Cvetic	D. Lust	Quevedo
9:30	Andriot	Bhardwaj	Wang	Wiesner	Moritz
10:00	Wrased	Schlechter	Garcia-Etxebarria	Valenzuela	Marchesano
10:30	Coffee Break				
Chair	Zavala	Raby	Lerche	Padilla	Parameswaran
11:00	Shiu	Nilles	Weigand	Jeong	Im
11:30	Scalisi	Kobayashi	Heidenreich	Parameswaran	Cicoli
12:00	Montero	Gray	S. Lust	Zavala	Faraggi
12:30	Lunch				
13:00					
13:30					
Chair	Hebecker		Quevedo		D. Lust
14:00	Westphal	Parallel 1	Huang	Parallel 1	Raby
14:30	Hamada		Grana		Ibanez
15:00	Farakos		GenHET CONFERENCE PHOTO		Martucci
15:30	Coffee Break				
Chair	Grana				
16:00	Lukas	Parallel 2		Parallel 2	
16:30	Krippendorf				
17:00	Ruehle				
17:30					
18:00	Reception (from 18:00) IBS Theory Building 1F Lounge				
18:30			Dinner (from 18:30) Ssangcheong Traditional Culture Center		
19:00					

Parallel [IBS Science & Culter Center (A: 3F Seminar Room / B: 2F Seminar Room / C: 2F Auditorium)]

Time	Tue 4			Thu 6		
Session	1-A	1-B	1-C	1-A	1-B	1-C
Chair	Kobayashi	Heckman	Shiu	K.-S. Choi	Moritz	Cribiori
14:00	Otsuka	Dierigl	Tokuda	R. Sun	Venken	Mininno
14:15	Takeuchi	Huebner	Sato	Kai	Righi	Petri
14:30	Kuespert	Liu	Quirant	Kawamura	Schreyer	Calderon-Infante
14:45	Takada	Oehlmann	Casagrande	Bies	Horer	Ruiz
15:00	Z. Sun	Loges	Van Hemelryck	Li	Ramos-Hamud	Angius
15:15	Weissman	Zatti	Tringas	Park	Ishiguro	Leedom
15:30	Coffee Break			Coffee Break		
15:45						
Session	2-A	2-B	2-C	2-A	2-B	2-C
Chair	Ruehle	Westphal	Martucci	S. Lee	Jeong	Plauschinn
16:00	Gendler	Padilla	Herraez	Ma	Angus	Parra De Freitas
16:15	Constantin	Kovensky	Castellano	Zhang	Schachner	Collazuol
16:30	Harvey	Toulikas	Cribiori	Las Heras	Tonioni	Alvarez-Garcia
16:45	Fraser-Taliente	Diaz Avalos	Melotti	Percival	Nian	Fraiman
17:00	Turner	Koga	Obied	X. Wang	Terada	Rajaguru
17:15	Seong	Tsukahara	Abe	Monnee	Revello	Delgado
17:30				Hoefnagels	Villa	Friedrich

Plenary Talks

Mon 3

Hebecker	Challenges of Stringy de Sitter and Asymptotic Acceleration
Andriot	Scalar potentials from (classical) string theory
Wrase	Asymptotic limits in moduli space
Shiu	Late-time Attractors and Cosmic Acceleration
Scalisi	Quantum Gravity Constraints on Cosmic Acceleration
Montero	A non-perturbative test of the DGKT vacuum
Westphal	Heterotic de Sitter Beyond Modular Symmetry
Hamada	Minimal matter supergravity and asymmetric orbifold
Farakos	Goldstino Condensation
Lukas	New Calabi-Yau Manifolds from Genetic Algorithms
Krippendorf	A new perspective on flux vacua
Ruehle	Massive string towers, level crossing, and black hole attractors

Tue 4

Heckman	Generalized Symmetries, Gravity, and Topological Non-Decoupling
Bhardwaj	Generalized Charges of Symmetries
Schlechter	Tameness and Complexity in QFTs
Nilles	The Taste of Flavor of (heterotic) string theory
Kobayashi	Modular weights of matter fields in LEEFT from type II string theory
Gray	Aspects of potential matching across heterotic transitions

Wed 5

Cvetic	Geometry of Higher Symmetries on (Non-) Compact F-/M-theory
Wang	Fermionic higher-form symmetries
Garcia-Etxebarria	An introduction to symmetry theories
Weigand	Infinite distance limits with defects
Heidenreich	Taxonomy of infinite distance limits and the species scale
S.Lust	Tadpoles and gauge symmetries
Huang	Carving out the open string effective field theory
Grana	Non-supersymmetric heterotic strings: gauge symmetry enhancement and one-loop cosmological constant in toroidal compactifications

Thu 6

D. Lust	Species Entropy and Thermodynamics
Wiesner	Bounds on Species Scale and the Distance Conjecture
Valenzuela	Sliding Towers, Dualities and the Species Scale
Jeong	Higher ($s > 2$) spin field and parity measurement from galaxies
Parameswaran	De Sitter Dialectics
Zavala	D-branes, Dark Energy and Pulsar Timing Arrays

Fri 7

Quevedo	TBA
Moritz	Axion-Photon couplings in type IIB string theory
Marchesano	Torsion in cohomology and dimensional reduction
Im	Imprints of string theory in low energy observables
Cicoli	Ultralight axions in string cosmology
Faraggi	TBA
Raby	Heterotic/F theory dual SU(5) model
Ibanez	Emergence in Quantum Gravity and the Scales of Fundamental Physics
Martucci	QG bounds, Gauss-Bonnet & wormholes

Parallel Talks - Tuesday 4

Session 1-A 3F Seminar Room 306 [Chair: Kobayashi]

Otsuka	Upper bound on the Atiyah–Singer index from tadpole cancellation
Takeuchi	Blow-up of magnetized T^2/Z_N and index theorem
Kuespert	Small Kinetic Mixing in String Theory
Takada	Phenomenology in magnetized orbifold models
Z. Sun	A dataset of R-symmetric Wess-Zumino models
Weissman	Meson scattering from string scattering in holographic QCD

Session 1-B 2F Seminar Room [Chair: Heckman]

Dierigl	Reflection 7-branes and how to use them
Huebner	The Branes Behind Generalized Symmetry Operators
Liu	Back to Heterotic Little String Theories on ALE Spaces
Oehlmann	Geometric Bounds on the 1-Form Gauge Sector
Loges	Towards a complete classification of 6D supergravities
Zatti	Aspects of string theory compactifications with non trivial torsional homology

Session 1-C 2F Auditorium [Chair: Shiu]

Tokuda	Gravitational positivity bounds: implications for the swampland program
Sato	Gravitational Positivity Bounds on Dark Gauge Boson
Quirant	Massive spin-2 particles and the swampland
Casagrande	Gravitino dynamics and the Swampland
Van Hemelryck	AdS scale separation and the distance conjecture
Tringas	on/off scale separation

Session 2-A 3F Seminar Room 306 [Chair: Ruehle]

Gendler	Axion-Photon Couplings in the String Landscape
Constantin	Line bundle cohomology
Harvey	Decoding Nature with Nature's Tools
Fraser-Taliente	How many Calabi-Yau manifolds are known? Placing upper and lower bounds on the Kreuzer-Skarke list
Turner	FTheoryTools: A computational tool for analysis of singular elliptic fibrations
Seong	Fano 3-Folds, Ypk Manifolds and Brane Brick Models

Session 2-B 2F Seminar Room [Chair: Westphal]

Padilla	The cosmological constant is probably still zero
Kovensky	Smearing and Unsmearing KKLT AdS Vacua
Toulikas	Smearing and Unsmearing KKLT AdS Vacua Part II
Diaz Avalos	Fayet-Iliopoulos D-Term in Non-Supersymmetric Heterotic String Orbifolds
Koga	Interpolation and cosmological constant in non-susy heterotic strings
Tsukahara	Life-time of Metastable Vacuum in String Theory and Trans-Planckian Censorship Conjecture

Session 2-C 2F Auditorium [Chair: Martucci]

Herraez	Entropy bounds and the (Species Scale) Distance Conjecture
Castellano	The Quantum Gravity cut-off in a 'Nutshell'
Cribiori	On the origin of species thermodynamics
Melotti	EFT strings and emergence
Obied	Dark Graviton Dark Matter
Abe	Black hole extremality in nonlinear electrodynamics

Parallel Talks - Thursday 6

Session 1-A 3F Seminar Room 306 [Chair: K.-S. Choi]

R. Sun	Full Landscape of Supersymmetric Pati-Salam Models from Intersection Brane Worlds
Kai	Flavor, CP and Metaplectic Modular Symmetries in Type IIB Chiral Flux Vacua
Kawamura	Quark and lepton hierarchies from S^4 modular flavor symmetry
Bies	Root bundles: Applications to F-theory Standard model
Li	Towards natural and realistic E7 GUTs in F-theory
Park	Hairy Black Holes by Spontaneous Symmetry Breaking

Session 1-B 2F Seminar Room [Chair: Moritz]

Venken	No Asymptotic Acceleration without Higher-Dimensional de Sitter Vacua
Righi	Number Theory and the Road to Heterotic Vacua
Schreyer	Challenges and new perspectives on dS vacua
Horer	Characterizing negative scalar potentials: an Anti-Trans-Planckian Censorship Conjecture
Ramos-Hamud	Perturbative de Sitter and Brane Inflation
Ishiguro	Sharpening the boundaries between flux landscape and Swampland by tadpole charge

Session 1-C 2F Auditorium [Chair: Cribiori]

Mininno	The Asymptotic Weak Gravity Conjecture in M-theory
Petri	Towards AdS Distances in String Theory
Calderon-Infante	Conserved Currents at Infinite Distance in the Conformal Manifold
Ruiz	Running decompactification, sliding towers and the distance conjecture
Angius	Small Black Hole Explosions
Leedom	Emergent Ensemble Symmetries in Holography and Swampland

Session 2-A 3F Seminar Room 306 [Chair: S. Lee]

Ma	$\mathcal{H}^{(p-1)}$ -Bracket for D \mathcal{H}^p -branes in Large R-R Field Background
Zhang	Generalised Bismut-Lichnerowicz formulae and quantum corrections in string theory
Las Heras	Strings, D-branes, and supergravities from supermembranes with discrete spectra
Percival	Free Fermionic Webs of Heterotic T-folds
X. Wang	Wilson loops, holomorphic anomaly equations and blowup equations
Monnee	Finiteness of flux vacua and the tadpole conjecture
Hoefnagels	Reducing differential systems for Feynman integrals and cosmological correlators

Session 2-B 2F Seminar Room [Chair: Jeong]

Angus	Perturbations in O(D,D) string cosmology
Schachner	Progress in constructing KKLT de Sitter vacua
Tonioni	Late-time accelerating cosmologies
Nian	Cosmic Acceleration and Turns in the Swampland
Terada	Implications of the gravitino mass/distance conjecture on inflation
Revello	Kination in String Theory
Villa	A Boltzmann equation approach to string thermodynamics

Session 2-C 2F Auditorium [Chair: Plauschinn]

Parra De Freitas	Heterotic strings and holomorphic factorization
Collazuol	Affine algebras at infinite distance limits in the Heterotic string
Alvarez-Garcia	Open-Moduli Infinite-Distance Limits in Six-Dimensional F-Theory
Fraiman	Cosmological Constant Extrema in the O(16) \times O(16) Heterotic String on S^1
Rajaguru	Non-geometric flux compactifications and the Swampland
Delgado	Global Anomaly Cancellation in Non-Supersymmetric Strings
Friedrich	Cobordism and Bubble of Nothing Decays in String Theory