UNIVERSITÀ DEGLI STUDI DI TORINO

INFN Istituto Nazionale di Fisica Nucleare

SCUOLA NORMALE SUPERIORE

New Frontiers in Theoretical Physics XXXVI Convegno Nazionale di Fisica Teorica

Wednesday 23 May 2018 - Saturday 26 May 2018

Cortona (Arezzo)

Programme

New Frontiers in Theoretical Physics 2018

CONVEGNO NAZIONALE DI FISICA TEORICA

Wednesday 23 May 2018

Morning Session - (09:10-10:50)

time	title	presenter
09:10	Lepton Flavour Universality in B decays	FERUGLIO, Ferruccio
10:00	Particle cosmology: from neutrinos to stringy inflation	LATTANZI, Massimiliano

Parallel Sessions (Aula 2) - (11:20-13:00)

time	title	presenter
11:20	Beyond Positivity Bounds in EFTs	SGARLATA, Francesco
11:45	Propagation of information in turning flocks of starling	JELIC, Asja
12:10	The SU(3) equation of state with non-equilibrium methods	NADA, Alessandro
12:35	Topological properties of the CP^{N-1} models in the large-N limit	BONANNO, Claudio

Parallel Sessions (Sala Papacello) - (11:20-13:00)

time	title	presenter
11:20	AdS5 black strings in the stu model of FI-gauged N = 2 supergravity	AZZOLA, Matteo
11:45	New D-term and de Sitter vacua in supergravity	CRIBORI, Niccolò
12:10	Hidden Symmetries of Supersymmetric Free Differential Algebras	RAVERA, Lucrezia
12:35	Curvature squared invariants in 6D N=(1,0) supergravity	TARTAGLINO-MAZZUCCHELLI, Gabriele

Afternoon Session - (14:30-16:10)

time	title	presenter
14:30	Nambu-Goldstone Composite Higgs(es)	DE CURTIS, Stefania
15:20	Entanglement and thermodynamics in non-equilibrium isolated quantum systems	CALABRESE, Pasquale

Parallel Sessions (Aula 2) - (16:40-18:20)

time	title	presenter
16:40	Supersymmetry versus Compositeness: 2HDMs tell the story	DELLE ROSE, Luigi
17:05	On the role of neutrino mixing in accelerated proton decay	PETRUZZIELLO, Luciano
17:30	Dynamical generation of fermion mixing	SMALDONE, Luca
17:55	Viability of A4, S4 and A5 Lepton Flavour Symmetries	TITOV, Arsenii

Parallel Sessions (Sala Papacello) - (16:40-18:20)

time	title	presenter
16:40	Twining Genera of K3	GORINI, Nicola
17:05	Localization of effective actions in Open Superstring Field Theory	MERLANO, Alberto
17:30	Elliptic non-Abelian DT invariants	POGGI, Matteo
17:55	Higher-Spin Asymptotic Symmetries, Charges and Soft Theorems	HEISSEMBERG, Carlo

Thursday 24 May 2018

Morning Session - (09:10-10:50)

time	title	presenter
09:10	Still searching for Dark Matter	CIRELLI, Marco
10:00	Holographic correlators and the information paradox	GIUSTO, Stefano

Parallel Sessions (Aula 2) - (11:20-13:00)

time	title	presenter
11:20	On the Lagrangian formulation of Gravity as a double-copy of two Yang-Mills theories	FERRERO, Pietro
11:45	Poincaré shapes the 3-point scattering amplitude for any masses and spins. And BMS?	MARZOLLA, Andrea
12:10	Amplituhedron meets Jeffrey-Kirwan Residue	PARISI, Matteo
12:35	Hyperbolic Geometry and Amplituhedra in 1+2 dimensions	SALVATORI, Giulio

Parallel Sessions (Sala Papacello) - (11:20-13:00)

time	title	presenter
11:20	Production cross sections of cosmic antiprotons	KORSMEIER, Michael
11:45	Bounds on the Dark Matter lifetime from Cosmic Dawn	MITRIDATE, Andrea
12:10	Dark Matter from adjoint fermions	PODO, Alessandro
12:35	Consistent models of Dark Energy after GW170817 and GRB170817A	TROMBETTA, Leonardo

Afternoon Session - (14:20-16:00)

time	title	presenter
14:20	Superstrings, lattice and AdS/CFT	FORINI, Valentina
15:10	Earth’s climate as a complex system	PROVENZALE, Antonello

Parallel Sessions (Aula 2) - (16:30-17:45)

time	title	presenter
16:30	Fakeons, Lee-Wick models and quantum gravity	ANSELMI, Damiano
16:55	Modified Unruh effect from Generalized Uncertainty Principle	LUCIANO, Gaetano
17:20	The ultraviolet behavior of quantum gravity with fakeons	PIVA, Marco

Parallel Sessions (Sala Papacello) - (16:30-17:45)

time	title	presenter

16:30	Wilson lines as superconformal defects in N=2 theories	BIANCHI, Lorenzo
16:55	Correlators between Wilson loop and chiral operators in N=2 conformal gauge theories	GALVAGNO, Francesco
17:20	A new hat for the ABJM matrix model: exact computation of latitude Wilson loops	GRIGUOLO, Luca

Special Session - (17:45-18:30)

time	title	presenter
17:45	GenHET- The new EU Working Group on gender issues in Theoretical Physics	PENATI, Silvia

Friday 25 May 2018

Morning Session - (09:10-10:50)

time	title	presenter
09:10	Flavor Physics for Non-Experts	MARTINELLI, Guido
10:00	Localization and non-perturbative dynamics in supersymmetric gauge theories	MORALES, Francisco

Parallel Sessions (Aula 2) - (11:20-13:00)

time	title	presenter
11:20	Gravitational lensing by black holes: theory and applications	ALDI, Giulio Francesco
11:45	Entropy for a Rotating Black Hole	GARATTINI, Remo
12:10	Black hole microstates in string theory	MASSAI, Stefano
12:35	Volume and complexity for warped AdS black holes	BAIGUERA, Stefano

Parallel Sessions (Sala Papacello) - (11:20-13:00)

time	title	presenter
11:20	Confinement and asymptotic freedom with Cooper pairs	DIAMANTINI, Maria Cristina
11:45	Integrability of Fishnet QFT in any dimension	OLIVUCCI, Enrico
12:10	Planar N=4 Wilson loops/amplitudes and Integrability	BONINI, Alfredo
12:35	Strongly deformed N=4 SYM in the double scaling limit as an integrable CFT	PRETI, Michelangelo

Afternoon Session - (14:30-16:10)

time	title	presenter
14:30	Neutrino Masses and Mixings: Status and Challenges	LISI, Eligio
15:20	Amplitudes (in the Standard Model and beyond)	DEL DUCA, Vittorio

Parallel Sessions (Aula 2) - (16:40-18:20)

time	title	presenter
16:40	From the Sakai-Sugimoto Model to the Generalized Skyrme Model	BARTOLINI, Lorenzo
17:05	Holographic phase transition in N=4 defect theory	BONANSEA, Sara
17:30	Three-forms: from Supergravity To Flux Compactifications	LANZA, Stefano

Parallel Sessions (Sala Papacello) - (16:40-18:20)

time	title	presenter
16:40	The natural structure of scattering amplitudes	ACCETTULLI-HUBER, Manuel

17:05	Renormalization group and epsilon expansion for multicritical box^k scalar theories	SAFARI, Mahmoud
17:30	Spectral Methods in Causal Dynamical Triangulations	CLEMENTE, Giuseppe
17:55	λϕ^4 at NNNNNNNNLO	SPADA, Gabriele

Saturday 26 May 2018

Morning Session - (09:10-10:50)

time	title	presenter
09:10	Gravitational Waves; where we are where we go	RICCI, Fulvio
10:00	LHC and beyond: future perspective for High Energy Physics	MANGANO, Michelangelo

Final Session - (11:20-12:10)

time	title	presenter
11:20	Future challenges for INFN	FERRONI, Fernando