

XXVII Workshop Beyond the Standard Model

Monday 16 March 2015 - Thursday 19 March 2015

**Physikzentrum Bad Honnef
Programme**

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Monday 16 March 2015

Prospects in String Phenomenology (09:00-10:30)

- Presenters: Mr. PALTI, Eran

QCD axion with high scale inflation (10:30-11:00)

- Presenters: CHOI, Kiwoon

Singlet extensions of the MSSM with Z_4 R-symmetry (11:20-11:40)

- Presenters: Mr. VAUDREVANGE, Patrick

Antibranes in AdS (11:40-12:00)

- Presenters: GAUTASON, Friðrik Freyr

Selection Rules Beyond $U(1)$'s in F-Theory Compactification (12:00-12:20)

- Presenters: MAYRHOFER, Christoph

Anomaly cancelation from geometric symmetries in F-theory (12:20-12:40)

- Presenters: Mr. KAPFER, Andreas

Building a social network of elliptic fibrations for F-Theory (14:20-14:40)

- Presenters: REUTER, Jonas

From Torsion to n-sections and Pati-Salam to the Standard Model in F-theory (14:40-15:00)

- Presenters: Mr. OEHLMANN, Paul-Konstantin

Discrete Symmetries in F-theory (15:00-15:20)

- Presenters: TILL, Oskar

Moduli Spaces of AdS Vacua in $d=7$, $N=2$ Supergravity (15:20-15:40)

- Presenters: LÜST, Severin

Systematics on particle physics D6-brane models on $T^6/Z_2 \times Z_6$ (16:00-16:20)

- Presenters: ECKER, Jill

Towards the Standard Model in F-theory (16:20-16:40)

- Presenters: Mr. LIN, Ling

Non-supersymmetric heterotic model building (16:40-17:00)

- Presenters: LOUKAS, Orestis

Inflationary Attractors, $f(R)$ -duals and the Power Spectrum (17:00-17:20)

- Presenters: Mr. BROY, Benedict

Tuesday 17 March 2015

Introduction to Exceptional Field Theory (09:00-10:30)

- Presenters: SAMTLEBEN, Henning

Warped M-theory effective actions (10:30-11:00)

- Presenters: Dr. GRIMM, Thomas

Anti-branes in flux backgrounds (11:20-11:40)

- Presenters: Mr. JUNGHANS, Daniel

Flux vacua on manifolds with SU(5)-structure in terms of generalized complex geometry (11:40-12:00)

- Presenters: PRINS, Daniël

De Sitter Vacua from a D-term Generated Racetrack Uplift (12:00-12:20)

- Presenters: Mr. RUMMEL, Markus

Higher Derivative Supergravity and Implications for Moduli Stabilization (12:20-12:40)

- Presenters: CIUPKE, David

Wednesday 18 March 2015

Recent Developments in (String) Cosmology (09:00-10:30)

- Presenters: BAUMANN, Daniel

Non-geometric Strings and Axion Inflation (10:30-11:00)

- Presenters: BLUMENHAGEN, Ralph

Tuning for Large Field Inflation in String Theory (11:20-11:40)

- Presenters: Dr. WITKOWSKI, Lukas

Challenges for Large-Field Inflation and Moduli Stabilization (11:40-12:00)

- Presenters: Mr. WINKLER, Martin Wolfgang

Natural inflation and moduli stabilization in heterotic orbifolds (12:00-12:20)

- Presenters: Dr. RUEHLE, Fabian

Yukawa hierarchies at the point of E_8 in F-theory (12:20-12:40)

- Presenters: Mr. REGALADO, Diego

Realising Axion Inflation in String Theory (14:20-14:40)

- Presenters: HERSCHMANN, Daniela

Backreaction of complex structure moduli in axion monodromy inflation (14:40-15:00)

- Presenters: ROMPINEVE, Fabrizio

Tunings in axion monodromy inflation with complex structure moduli (15:00-15:20)

- Presenters: MANGAT, Patrick

The little hierarchy problem in the light of extra dimensions (15:20-15:40)

- Presenters: ZARATE, Lucila

Deforming Z_2 singularities in $T^6/(Z_2 \times Z_{2N})$ orbifolds (16:00-16:20)

- Presenters: KOLTERMANN, Isabel

Yukawa couplings for intersecting D-branes on non-factorisable tori (16:20-16:40)

- Presenters: Mr. LIYANAGE, Christoph

Hyperbolic Geometry and the Lorentz Group (16:40-17:00)

- Presenters: DRAGON, Norbert

Radiative effects in decay of metastable vacua: a Green's function approach (17:00-17:20)

- Presenters: MILLINGTON, Peter

Thursday 19 March 2015

New exact Results in Supersymmetric Field Theories (09:00-10:30)

- Presenters: CREMONESI, Stefano

2D Gauged Linear Sigma Models and Homological Projective Duality (10:30-11:00)

- Presenters: JOCKERS, Hans

A pair of Calabi-Yau threefolds from a pair of dual non-abelian gauged linear sigma models (11:20-11:40)

- Presenters: GERHARDUS, Andreas

SL(2,C) Chern-Simons theory, quantum curves, and 4d quantum geometry (11:40-12:00)

- Presenters: HAN, Muxin

Topological Strings on Mirror Curves of Genus Two and Siegel Modular Forms (12:00-12:20)

- Presenters: SCHIMANNEK, Thorsten

Heterotic String in Double field theory (12:20-12:40)

- Presenters: SUN, Rui