

FRG: Generalized Geometry, String Theory, and Deformations

August 25-27, 2012

Harvard University Science Center Room 507

Saturday August 25, 2012

10:00 am -11:00 am	Lara Anderson (Harvard)	Heterotic vector bundles, deformations and conifold transitions
11:00 am - 11:15 am	<i>break</i>	
11:15 am - 12:15 pm	Cumrun Vafa (Harvard)	Topological strings, Q-deformed A-polynomials and knot contact homology
12:15 pm - 2:00 pm	<i>lunch</i>	
2:00 pm - 3:00 pm	Bong Lian (Brandeis)	Period integrals and tautological systems
3:00 pm - 3:15 pm	<i>break</i>	
3:15 pm - 4:15 pm	Ron Donagi (U Penn)	Superstring perturbation theory and obstructions to splitting the moduli of super Riemann surfaces
4:15 pm - 4:30 pm	<i>break</i>	
4:30 pm - 5:30 pm	Katrin Becker (Texas A&M)	D-brane and O-plane actions from string amplitudes

Sunday August 26, 2012

10:00 am -11:00 am	Jonathan Heckman (IAS)	Covariant non-commutative geometry from string theory
11:00 am - 11:15 am	<i>break</i>	
11:15 am - 12:15 pm	An Huang (Harvard)	The holonomic rank problem
12:15 pm - 1:30 pm	<i>lunch</i>	
1:30 pm - 2:30 pm	Albion Lawrence (Brandeis)	Entanglement entropies, bosonization, and Riemann surfaces
2:30 pm - 2:45 pm	<i>break</i>	
2:45 pm - 3:45 pm	Shing-Tung Yau (Harvard)	Concept of space adapted to modern physics
3:45 pm - 4:00 pm	<i>break</i>	

4:00 pm - 5:00 pm	Tony Pantev (U Penn)	Integral transforms in non-abelian Hodge theory
5:00 pm - 5:15 pm	<i>break</i>	
5:15 pm - 6:15 pm	Siu Cheung Lau (Harvard)	Open mirror theory and crepant resolution conjecture

Monday August 27, 2012

9:00 am - 10:00 am	Paul Seidel (MIT)	Extended automorphism groups in symplectic and algebraic geometry
10:00 am - 10:15 am	<i>break</i>	
10:15 am - 11:15 am	Si Li (Northwestern)	Quantum A1 singularity and pure gravity
11:15 am - 11:30 am	<i>break</i>	
11:30 am - 12:30 pm	Washington Taylor (MIT)	F-theory and structure of elliptically fibered Calabi-Yau threefolds
12:30 pm - 2:00 pm	<i>lunch</i>	
2:00 pm - 3:00 pm	Li-Sheng Tseng (UC Irvine)	Cohomologies of differential forms on symplectic spaces
3:00 pm - 3:15 pm	<i>break</i>	
3:15 pm - 4:15 pm	Mboyo Esole (Harvard)	Generalized tadpole relation in F-theory
4:15 pm - 5:15 pm	Edgar Shaghoulian (Stanford)	Hyperscaling violation and holography