JDG 2017 Conference on Geometry and Topology: Celebrating 50 years of the Journal of Differential Geometry

Friday April 28, 2017

ST Yau, HD Cao, etc.	Opening Comments
Cliff Taubes (Harvard)	The behavior of sequence of solutions to the Vafa-Witten equations
Melissa Liu (Columbia)	Mirror symmetry and topological recursion
Cumrun Vafa (Harvard)	String theory and homological invariants for 3-manifolds
Dan Freed (U Texas)	Complex Chern-Simons invariants of 3-manifolds and abelianization
Frances Kirwan (Oxford)	Variation of non-reductive geometric invariant theory
Mina Aganagic (UC Berkeley)	Mathematical applications of little string theory
Caucher Birkar (Cambridge)	Singularities and Fano varieties in birational geometry
Duong Phong (Columbia)	Supersymmetric string vacua with torsion and geometric flows
Richard Schoen (UC Irvine)	The Einstein constraint equations
Fernando Coda Marques (Princeton)	The space of cycles, a Weyl's law for minimal hypersurfaces and Morse index estimates
Ciprian Manolescu (UCLA)	Homology cobordism and triangulations
Banquet at Loeb House	By invitation only
Jun Li (Stanford)	New recursion relation for GW of quintic CY via mixed-spin- P fields
Si Li (Tsinghua)	Vertex algebras, quantum master equation and mirror symmetry
Yujiro Kawamata (U Tokyo)	Birational geometry and derived categories
Alena Pirutka (Courant Institute, NYU)	Irrationality problems
Mu-Tao Wang (Columbia)	Linear stability of Schwarzschild black hole: the Cauchy problem of metric coefficients
Jean-Pierre Demailly (Grenoble)	L^2 Extension theorem for sections defined on non reduced analytic subvarieties
Bong Lian (Brandeis)	The Riemann-Hilbert problem for period integralsrecent applications
Steve Zelditch (Northwestern)	Local and global analysis of nodal sets
	Cliff Taubes (Harvard) Melissa Liu (Columbia) Cumrun Vafa (Harvard) Dan Freed (U Texas) Frances Kirwan (Oxford) Mina Aganagic (UC Berkeley) Caucher Birkar (Cambridge) Duong Phong (Columbia) Richard Schoen (UC Irvine) Fernando Coda Marques (Princeton) Ciprian Manolescu (UCLA) Banquet at Loeb House Jun Li (Stanford) Si Li (Tsinghua) Yujiro Kawamata (U Tokyo) Alena Pirutka (Courant Institute, NYU) Mu-Tao Wang (Columbia) Jean-Pierre Demailly (Grenoble) Bong Lian (Brandeis)

Monday May 1, 2017		
9:00–9:50 am	Richard Hamilton (Columbia)	tba
10:05–10:55 am	Huai-Dong Cao (Lehigh)	Geometry and stability of Ricci solitons
11:10–12:00 pm	Larry Guth (MIT)	Efficiently contracting contractible maps
12:00-1:30 pm lunch br	eak	
1:30–2:20 pm	Simon Donaldson (Stony Brook)	Variational problems related to special holonomy
2:35–3:25 pm	Blaine Lawson (Stony Brook)	Lagrangian potential theory and a Lagrangian equation of Monge-Ampère type
3:45-4:35 pm	William Meeks (UMASS Amherst)	Recent progress in the theory of CMC surfaces in 3-manifolds
Tuesday May 2, 2017		
9:00–9:50 am	Camillo De Lellis (ETH Zurich)	The Onsager theorem
10:05–10:55 am	Denis Auroux (UC Berkeley)	Speculations about homological mirror symmetry for affine hypersurfaces
11:10–12:00 pm	John Pardon (Princeton)	Liouville sectors and local open-closed map
12:00-1:30 pm lunch br	eak	
1:30–2:20 pm	William Minicozzi (MIT)	Level set method for motion by mean curvature
2:35–3:25 pm	Kenji Fukaya (Stony Brook)	Equivariant Floer homology
3:45–4:35 pm	David Gabai (Princeton)	The 4-Dimensional light bulb theorem
4:50–5:40 pm	Artan Sheshmani (Harvard)	Nested Hilbert schemes, local Donaldson-Thomas theory, Vafa-Witten and Seiberg-Witten invariants
5:55–6:45 pm	Tristan Collins (Harvard)	The deformed Hermitian-Yang-Mills equation