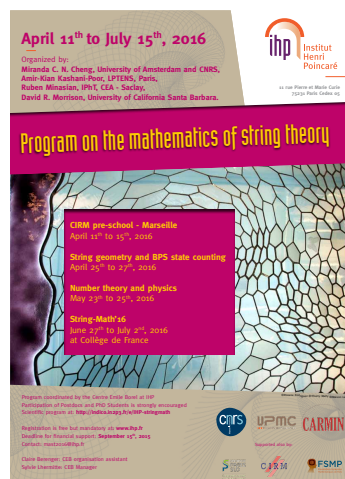


« Program on the mathematics of string theory »  
Paris, April 11<sup>th</sup> – July 15<sup>th</sup>, 2016

String geometry and BPS state counting  
Paris, April 25<sup>th</sup> – April 27<sup>th</sup>, 2016

Amphitheater Hermite



**Organizers :**

**Miranda Chih-Ning Cheng** (Amsterdam University)

**Amir-Kian Kashani-Poor** (LPTENS)

**Ruben Minasian** (IPhT CEA-Saclay)

**David Robert Morrison** (California University)

**Speakers :**

**Kai Behrend** (University of British Columbia)

**Alexander Braverman** (Brown University)

**Jim Bryan** (University of British Columbia)

**Erik Carlsson** (Harvard University)

**Michele Del Zotto** (Harvard University)

**Tudor Dimofte** (Perimeter Institute and UC Davis)

**Lothar Göttsche** (ICTP)

**Sergei Gukov** (Caltech)

**Hans Jockers** (Bonn University)

**Albrecht Klemm** (Bonn University)

**Kimyeong Lee** (KIAS)

**Guglielmo Lockhart** (Amsterdam University)

**Ed Segal** (Imperial College)

**Ashoke Sen** (Harish-Chandra Research Institute)

**Bernd Siebert** (Hamburg University)

**Balazs Szendrői** (St Peter's College and Oxford University)

**Constantin Teleman** (UC Berkeley)

**Piljin Yi** (KIAS)

## PROGRAM

### Monday April 25<sup>th</sup>

09.00 am – 09.30 am	<b>Registration</b>	IHP ground floor
09.30 am – 10.30 am	<b>Ashoke Sen</b>	Do all BPS black hole states carry zero angular momentum?
10.30 am – 11.00 am	Coffee break	IHP ground floor
11.00 am – 12.00 pm	<b>Constantin Teleman</b>	Twisted sectors in 2D gauge theory.
12.00 pm – 01.30 pm	Lunch break	
01.30 pm – 02.30 pm	<b>Sergei Gukov</b>	Mock modularity and BPS spectra of 3-manifolds.
02.30 pm – 03.30 pm	<b>Erik Carlsson</b>	Hilbert schemes, combinatorics, and character varieties.
03.30 pm – 04.00 pm	Coffee break	IHP ground floor
04.00 pm – 05.00 pm	<b>Tudor Dimofte</b>	3d BPS states, monopoles, and a finite version of AGT.
05.00 pm – 06.00 pm	<b>Alexander Braverman</b>	The mathematics of Coulomb branches of 3d and 4d gauge theories.

### Tuesday April 26<sup>th</sup>

09.30 am – 10.30 am	<b>Balazs Szendroi</b>	Euler characteristics of Hilbert schemes of points of some singular surfaces.
10.30 am – 11.00 am	Coffee break	IHP ground floor
11.00 am – 12.00 Pm	<b>Albrecht Klemm</b>	Elliptic CY 3-fold, refined BPS states and weak Jacobi Forms.
12.00 pm – 01.30 pm	Lunch break	
01.30 pm – 02.30 pm	<b>Ed Segal</b>	Non-abelian GLSMs and Homological Projective Duality for Pfaffians.
02.30 pm – 03.30 pm	<b>Guglielmo Lockhart</b>	6d BPS strings from various angles.
03.30 pm – 04.00 pm	Coffee break	IHP ground floor
04.00 pm – 05.00 pm	<b>Bernd Siebert</b>	Punctured Gromov-Witten invariants.
05.00 pm – 06.00 pm	<b>Kimyeong Lee</b>	Aspects of 6d Supersymmetric Theories.
<b>06.30 pm – 09.00 pm</b>	<b>Cocktail</b>	<b>IHP ground floor</b>

### Wednesday April 27<sup>th</sup>

09.30 am – 10.30 am	<b>Piljin Yi</b>	Witten Index, Wall-Crossing, and Threshold Bound States.
10.30 am – 11.00 am	Coffee break	IHP ground floor
11.00 am – 12.00 am	<b>Jim Bryan</b>	Curve counting on Abelian surfaces and threefolds and Jacobi forms.
12.00 pm – 01.30 pm	Lunch break	

01.30 pm – 02.30 pm	<b>Hans Jockers</b>	Quantum periods of Calabi-Yau fourfolds.
02.30 pm – 03.30 pm	<b>Lothar Göttsche</b>	Refined curve counting.
03.30 pm – 04.00 pm	Coffee break	IHP ground floor
04.00 pm – 05.00 pm	<b>Michele Del Zotto</b>	Categorical Galois Covers and BPS states of 4D N=2 theories.
05.00 pm – 06.00 pm	<b>Kai Behrend</b>	The spectrum of the inertia operator on the motivic Hall algebra.

Abstracts are available on the website of the trimester « **Program on the mathematics of string theory** »: <https://indico.in2p3.fr/event/11584/page/3>



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