

Princeton Center for Theoretical Science

The Princeton Center for Theoretical Science is dedicated to exploring the frontiers of theory in the natural sciences. Its purpose is to promote interaction among theorists and seed new directions in research, especially in areas cutting across traditional disciplinary boundaries.

The Center is home to a corps of Center Postdoctoral Fellows, chosen from nominations made by senior theoretical scientists around the world. A group of senior Faculty Fellows, chosen from science and engineering departments across the campus, are responsible for guiding the Center. Center activities include focused topical programs chosen from proposals by Princeton faculty across the natural sciences. The Center is located on the fourth floor of Jadwin Hall, in the heart of the campus "science neighborhood". The Center hopes to become the focus for innovation and cross-fertilization in theoretical natural science at Princeton.

Faculty Fellows

Paul Steinhardt, Director
Igor Klebanov, Associate Director
Ravindra Bhatt, Acting Associate Director
Adam Burrows
Curtis Callan
Roberto Car
David Huse
Salvatore Torquato
Jeroen Tromp

Center Postdoctoral Fellows

Benjamin Basso 2009-2012
Adam Brown 2009-2012
Bryan Clark 2009-2012
Yoav Kallus 2011-2014
Mariangela Lisanti 2010-2013
Joseph Maciejko 2011-2014
Elisabetta Matsumoto 2011-2014
Timothy Merlis 2011-2014
Marco Schiro', 2010-2013
Alexander Tchekhovskoy 2010-2013
Masahito Yamazaki 2010-2013

To find out more about Center Postdoctoral Fellowships and Programs see:

<http://pcts.princeton.edu/pcts>



Exact Methods in Gauge/String Theories

11-12 November 2011

**PCTS – Jadwin Hall
Fourth Floor, Room 407**

Organizers

**Benjamin Basso
Masahito Yamazaki
Herman Verlinde**

Exact Methods in Gauge/String Theories

Friday, 11 November 2011

- 8:30 am** **Breakfast**
- 8:50 am** **Welcoming Remarks**
- 9:00 – 9:50 "Supercurrents"
Nathan SEIBERG, IAS
- 10:00 – 10:45 "Dualities for 3d gauge theories with tensor matter"
Anton KAPUSTIN, CalTech
- 10:45 – 11:15** **Coffee break**
- 11:15 – 12:00 "Braids, Walls and Mirrors"
Cumrun VAFA, Harvard University
- 12:00–1:45 pm** **Lunch**
- 2:00 – 2:45 "Non-Abelian statistics versus the Witten anomaly"
John MCGREEVY, MIT
- 2:45 – 3:30 "Chern-Simons vector models and higher spin gauge theory"
Xi YIN, Harvard University
- 3:30 – 4:00** **Coffee break**
- 4:00 – 4:45 "Gauge theories and Macdonald polynomials"
Leonardo RASTELLI, SUNY, Stony Brook

Exact Methods in Gauge/String Theories

Saturday, 12 November 2011

- 8:30 am** **Breakfast**
- 9:00 – 9:50 "F-maximization and the F-theorem in 3d"
Daniel JAFFERIS, Harvard University
- 10:00 – 10:45 "Maximally Supersymmetric D3"
Shamit KACHRU, Stanford University
- 10:45 – 11:15** **Coffee break**
- 11:15 – 12:00 "Refined Chern-Simons Theory and Knot Homology"
Mina AGANAGIC, Berkeley
- 12:00–1:45 pm** **Lunch**
- 2:00 – 2:45 "TBA"
Nikita NEKRASOV, IHES
- 2:45 – 3:30 "Instanton Calculus for Quiver Theories"
Vasily PESTUN, IAS
- 3:30 – 4:00** **Coffee break**
- 4:00 – 4:45 "Superstring Perturbation Theory Revisited"
Edward WITTEN, IAS