

## Princeton Center for Theoretical Physics

The Princeton Center for Theoretical Physics is a new, University-funded enterprise 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. The full complement of nine Fellows will be in residence by Fall 2008. 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 involving participants from inside and outside the university. To house these activities, the University is constructing a dedicated facility in Jadwin Hall, home of the Physics Department, 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:

Curtis Callan, Director  
Paul Steinhardt, Associate Director  
Ravindra Bhatt  
William Bialek  
Igor Klebanov  
Shivaji Sondhi  
David Spergel  
Salvatore Torquato

### Center Postdoctoral Fellows:

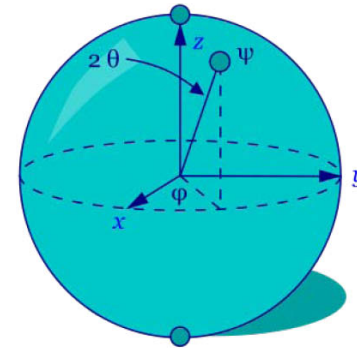
Bogdan Andrei Bernevig 2006-2009  
Thomas Klose 2007-2010  
Jean-Luc Lehners 2007-2010  
Meera Parish 2006-2009  
Antonello Scardicchio 2006-2009  
Branson Stephens 2007-2010  
Aleksandra Walczak 2007-2010



# Symposium on The Route to Non-Abelian Physics

## Frontiers in Quantum Computing Program

**February 13, 2008**  
**9:15 am – 4:00 pm**



### Organizers

William Brinkman, Robert Calderbank, Gerald Gilbert  
Shivaji Sondhi

**Sponsored by**  
**Princeton Center for Theoretical Physics**  
**&**  
**The MITRE Corporation**

# Symposium on The Route to Non-Abelian Physics

February 13, 2008

Room 343, Jadwin Hall

9:15 am – 4:00 pm

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|------------------------|--|
| 9:15 – 9:30 am         | Introduction: <b>Curtis Callan &amp; Shivaji Sondhi, Princeton U.</b>  |
| 9:30 – 10:00 am        | Overview: <b>Bert Halperin, Harvard U.</b>   |
| 10:00 – 10:50 am       | <i>“Detecting abelian anyons”</i><br><b>Vladimir Goldman, Stony Brook</b>  |
| 10:50 – 11:40 am       | <b>Amir Yacoby, Harvard U.</b>   |
| 11:40 – 12:30 pm       | <i>“Confinement of Fractional Quantum Hall States”</i><br><b>Robert Willett, Alcatel-Lucent</b>  |
| <b>12:30 – 2:00 pm</b> | <b>Lunch—Brush Gallery, McDonnell Hall</b>   |
| 2:00 – 2:50 pm         | <b>Charles Marcus, Harvard U.</b>  |
| 2:50 – 3:30 pm         | Summary discussion led by <b>Bernd Rosenow, Harvard U.</b>   |
| 3:30 – 4:00 pm         | <i>“Superconducting proximity effect and Majorana Fermions at the surface of a topological insulator”</i><br><b>Charles Kane, University of Pennsylvania</b> |