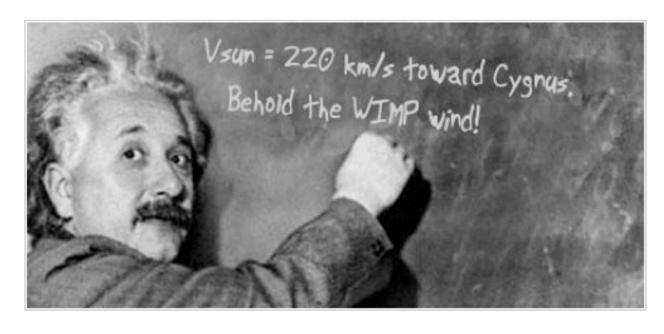


## **CYGNUS 2009**

**Directional Dark Matter Detection** 



Massachusetts Institute of Technology June 11-13, 2009

Gabriella Sciolla (MIT)







### Goals and format of Cygnus 2009

#### The Cygnus series

Cygnus 2007 in Boulby Underground Laboratory, UK

#### Goals

- Bring together the international Directional DM community
  - Theorists and experimentalists
  - Particle physicists and astronomers
- Discuss progress, share information
- Coordinate efforts toward a large directional dark matter experiment

#### **Format**

- Inexpensive: no conference fee -- less donuts but more people
- Workshop: questions are welcome, discussions encouraged
- One short term goal: a white paper by the end of this week (James)

#### http://web.mit.edu/cygnus2009/program.html

# **Agenda**

#### Thursday, June 11 (8:00-9:00 Registration)

9:00-10:30 Session I: Motivation for Directional Detection 11:00-12:30 Session II: Theoretical Interpretation of Recent Results and Consequences for Directional Searches

2:00-3:30 Session III: Directional Dark Matter Experiments I 4:00-5:30 Session IV: Directional Dark Matter Experiments II

6:30 Workshop Dinner

#### Friday, June 12

9:00-10:30 Session V: Directional Detection Reconstruction & Analysis Techniques 11:00-12:30 Session VI: Directional Detection R&D and Backgrounds

2:00-3:30 Session VII: Beyond Dark Matter with Directional Detectors 4:00-5:30 Session VIII: Dark Matter Astrophysics

#### Saturday, June 13

9:00-10:30 Session IX: Future Planning Discussion 11:00-12:30 Session X: White Paper Discussion

## Agenda change

Session I: Motivation for Directional Detection

Thursday, June 11

(chair: Prof. Gabriella Sciolla)

9:00 Welcome

Prof. Ed Bertschinger, MIT Department of Physics, Head

Prof. Gabriella Sciolla, Massachusetts Institute of Technology, USA

9:15 White Paper / Proceedings,
Dr. James Battat, Massachusetts Institute of Technology, USA

9:30 Motivation for Directional Detection I, Prof. Ioannis (J.D.) Vergados, University of Ioannina, GR

10:00 Optimizing Directional Detectors, Dr. Anne Green, University of Nottingham, UK Combined (Anne Green)

10:30 Coffee Break

## Lunch/breakfast options

- Stratton Student Center (W20)
  - 1st floor: Anna's Taqueria, Cambridge Grill
  - 2nd floor: Food Court



- Stata Center Cafeteria (bldg 32)
  - Forbes Family Café (first floor)



- Near Kendall T stop: Vietnamese, Middle Eastern
- Near 77 Mass Avenue: Chinese
- Peet's
  - Lobby of bldg 7 (77 Mass Avenue)

Gabriella Sciolla - MIT





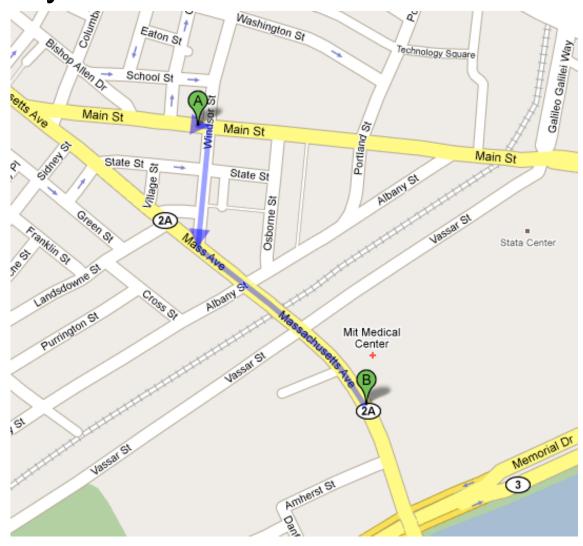
## **Workshop Dinner**

6:30 PM tonight at Royal East

792 Main St., Cambridge, MA (617) 661-1660

\$20/person

Sign-up when you register



Gabriella Sciolla - MIT

# Thanks to those who made Cygnus 2009 possible

- Sponsors
  - NSF, MIT Kavli Institute, Laboratory for Nuclear Science
- International Organizing Committee
  - White Paper contributors
- Local Organizing Committee
  - James Battat
  - Jocelyn Monroe
  - Sheela Hulsoor-Marston
  - Tan-Quy Tran
- Scientific Secretaries
  - Jeremy Lopez and Albert Lee (Talks)
  - Asher Kaboth, Shawn Henderson, Emily Krupczak, Hayk Yegoryan,
     Tom Caldwell (Registration desk)