

# FFThPh: Fermilab Fellowships in Theoretical Physics

Andreas Kronfeld



# DOE Review

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- “It is too bad that more students do not have the opportunity to interact with [the Theoretical Physics Department]. The TP group, and Fermilab management, is encouraged to **search for ways to get more students** involved with Fermilab theorists, **especially students from nearby universities**. On the other hand, the TP group has been **very successful in training postdocs**, many of whom have gone on to good positions in other laboratories or universities.” — *Resulting report*.

# Student Policy Committee

- At September 2009 site visit, we are encouraged to start setting up a program.
- Directorate and Chris Hill appoint “Student Policy Committee”:
  - ASK (Chair), M. Carena, B. Dobrescu, & S. Dodelson;
  - ASK = point of contact with DOE.
  - CN Leung = point of contact @ DOE.

# Fact Finding

- Discussions with colleagues: What kind of program do we want?
- Most TPD prefer several-month to 1-year fellowship, though several prefer “whole Ph D.”
- TAD interested in “whole Ph D” (as with UoC).
- Discussions with university profs, SLAC staff, PIs of NSF LHC TI: cost & dynamics.

# Resulting Program

- 1-year, non-renewable, fellowship for Ph D theory students in at any US graduate school:
  - sweet spot: 2nd-to-last year.
- 12 months (or less, if degree awarded early).
- \$30,000 stipend + tuition + insurance + relocation.
- Fermilab overhead; no university overhead.
- Total budget: \$250,000 for 5 fellows.

# “Enrichment” Model

- Fermilab is *the* national lab for HEP: all US universities should be treated the same.
- Students remain enrolled at universities under same supervisor:
  - no need for us to obtain status (e.g., adjunct app’t) at various universities.
- Many students and Fermilab staff can take advantage.

# Process/Timeline

<http://theory.fnal.gov/students/>

- FFThPh announced early April;
  - coordination with Fermilab staff strongly encouraged;
- Applications due 14 May;
  - 11 serious applications; another dozen non-serious;
- Selections made 24 May: 5 selected + 4 on waiting list;
- Official offers sent out (after setting up POs) late June.

# Future Improvements

## (to process)

- Fellowship is now defined, and “behind-the-scenes” aspects of financing have been worked out.
- Deadline for next year can be much earlier, e.g., mid-February.
- Deliberation period can be longer: use to extend and improve dialog between students and Fermilab staff.
- More of every constituency can get involved.

# 2010–2011 Fellows

Student	University	Advisor	Topic	Fermilab supervisor	Arrival date
Chris Bouchard	Illinois	El-Khadra	lattice QCD	Kronfeld	8/30
Gordan Krnjaic	Johns Hopkins	Kaplan	BSM/astro	Dobrescu	9/1
Tim Linden	UCSC	Profumo	particle astro	Dodelson	8/15
Alejandro de la Puente	Notre Dame	Delgado	BSM	Carena	8/23
Yuhsin Tsai (蔡宇信)	Cornell	Grossman	BSM	Harnik	9/1

# Comments

- TPD is unanimous in its support for the hugely successful postdoc program.
- Grateful that FFThPh is a **supplement** to budget.
- Some “thrusts”—e.g., lattice QCD—may also profit from “whole Ph D” model.
- Some staff—e.g., those part-time at UoC—remain strongly interested in “whole Ph D” model.