

# Physics Division 2015 Committee of Visitors (PHY COV)

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Eric Cornell

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# Physics Division 2015 Committee of Visitors (PHY COV)

## The charge:

The COV was charged to address and prepare a report on:

- the integrity and efficacy of processes used to solicit, review, recommend, and document proposal actions;
- the quality and significance of the results of the Division's programmatic investments;
- the relationship between award decisions, program goals, and Foundation-wide programs and strategic goals;
- the Division's balance, priorities, and future directions;
- the Division's response to the prior COV report of 2012; and
- any other issues that the COV feels are relevant to the review.

# The COV: 30 members, 10 subcommittees. Subcommittee Chairs in Red.

## *COV Chair,*

**Eric Cornell**, JILA

## *Physics of Living Systems*

**Jose Onuchic**, Rice

Ringe Dagmar, Brandeis

Ranajeet Ghose, CUNY

## *EPP Theory and Math Phys*

Sally Dawson, BNL

**Joanne Hewett**, SLAC

Marcela Carena, Fermilab

## *AMOP Theory+Exp, QIS*

**Chris Greene**, Purdue

Linda Young, ANL

Fred Driscoll, UCSD

Gerald Gabrielse, Harvard

## *Nuclear Physics*

Roxanne Springer, Duke

Julie Roche, Ohio U.

Helen Caines, Yale

**Sherry Yennello**, Texas A&M

## *EPP Exp and Grid Comp.*

Gabriella Sciolla, Brandeis

Michael Hildreth, Notre Dame

**Herman White**, Fermilab

## *Particle Astrophysics*

**Lucy Fortson**, Minnesota

Pierre Sokolsky, Utah

Betty Young, Santa Clara

## *Gravity (inc. LIGO)*

Jeffrey Livas, NASA

**Jorge Pullin**, LSU

John Friedman, Wisconsin-Milw.

## *Integ. Activities in Physics*

**Cathy Mader**, Hope College

Marco Cavaglia, Mississippi

## *Accelerator*

**Fulvia Pilat**, JLAB

Pietro Musumeci, UCLA

## *PFC +Midscale+ Comp. Phys.*

Jonathan Bagger, TRIUMF

Paul LaMarche, Princeton

**Amber Boehnlein**, Stanford

## The Report:

“[O]nly the exhaustive can be truly interesting.”

Thomas Mann, preface to *The Magic Mountain*,  
his novel of 722 pages.

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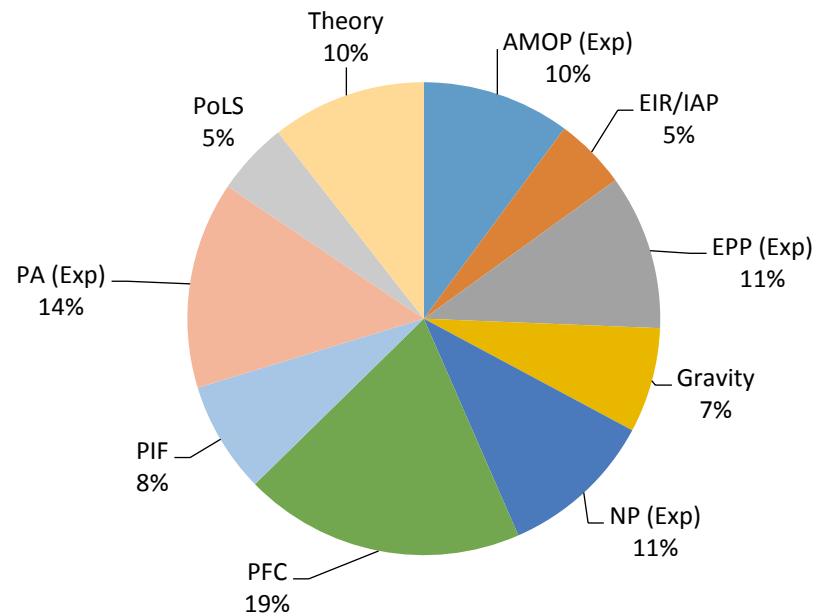
“You will want to read every page.”

The 2015 PHY Committee of Visitors, in  
reference to their report of 110 pages.

# The Division:

	FY2012	FY2013	FY2014
Research Project Support	\$204 M	\$177 M	\$186 M
Facilities	\$73 M	\$73 M	\$80 M
Total	\$277 M	\$250 M	\$266 M

**FY12-14 Research Project Support**



## The Division:

PHY funds grants that differ by more than a factor of 1000 in dollar amount.

Topics range from neutrino oscillations to biomechanics.

## Some key findings and recommendations:

1. Approach to reviewing.
2. Management in the Time of Budget Stress
3. Data Collection re Broadening Participation
4. Portfolio management



## 1. Approach to reviewing.

We looked at 100s of jackets, and were uniformly impressed with quality, rigor, fairness, of process.

We like the multi-tiered approach. Robust to flaws in individual elements of process. Labor intensive, but “the gold standard.”

Program officer remains key figure. Nurture, retain, don't burn them out.

## 2. Management in the Time of Budget Stress

Dehmer and Caldwell became Caldwell and Keister. Lots of other personnel changes. Meanwhile, the rescission!

It could have been really bad.

Disaster averted. Short-term and long-term balanced. Tough choices: approach hard-nosed but transparent.

COV feels confident in leadership and whole staff.

### 3. Data collection re broadening participation.

Broadening Participation persistent problem especially with respect to URM.

Hard to fix what you can't measure.

Problem both in collection and distribution of data. (Not just PHY.)

Example: REU programs. But issue at all levels.

Privacy issues aren't insurmountable. (cont'd)

### 3. Data collection re broadening participation (cont'd)

Circular problem.

Recommendation: Trigger for data collection.

“Don't wish to reveal”, means can nudge PIs.

After data is collected, how can it be looked at.

Foundation-wide issue.

## 4. Science-driven portfolio approach

program-driven vs science-driven

COV really likes the PHY emphasis on latter.

Good for: communicating with public; demonstrating alignment with National Priorities; management and balance!