

International Gender Issues in Physics

March APS Meeting

New Orleans, LA

13 March 2008

Session V34

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Moderator



**The 3rd IUPAP International
Conference on Women in Physics**

October 8-10, 2008

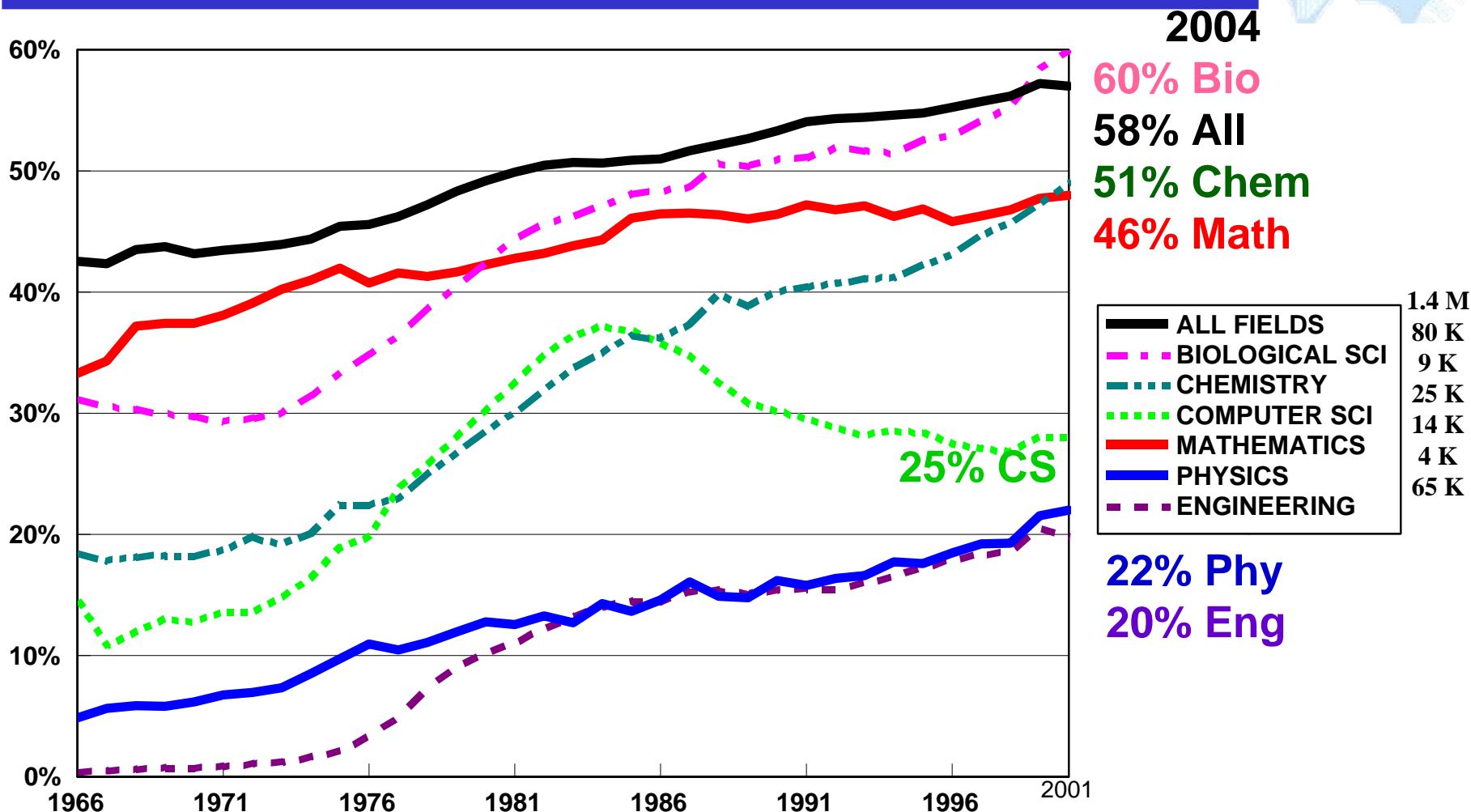
Seoul, Korea

Physics Needs MORE Women



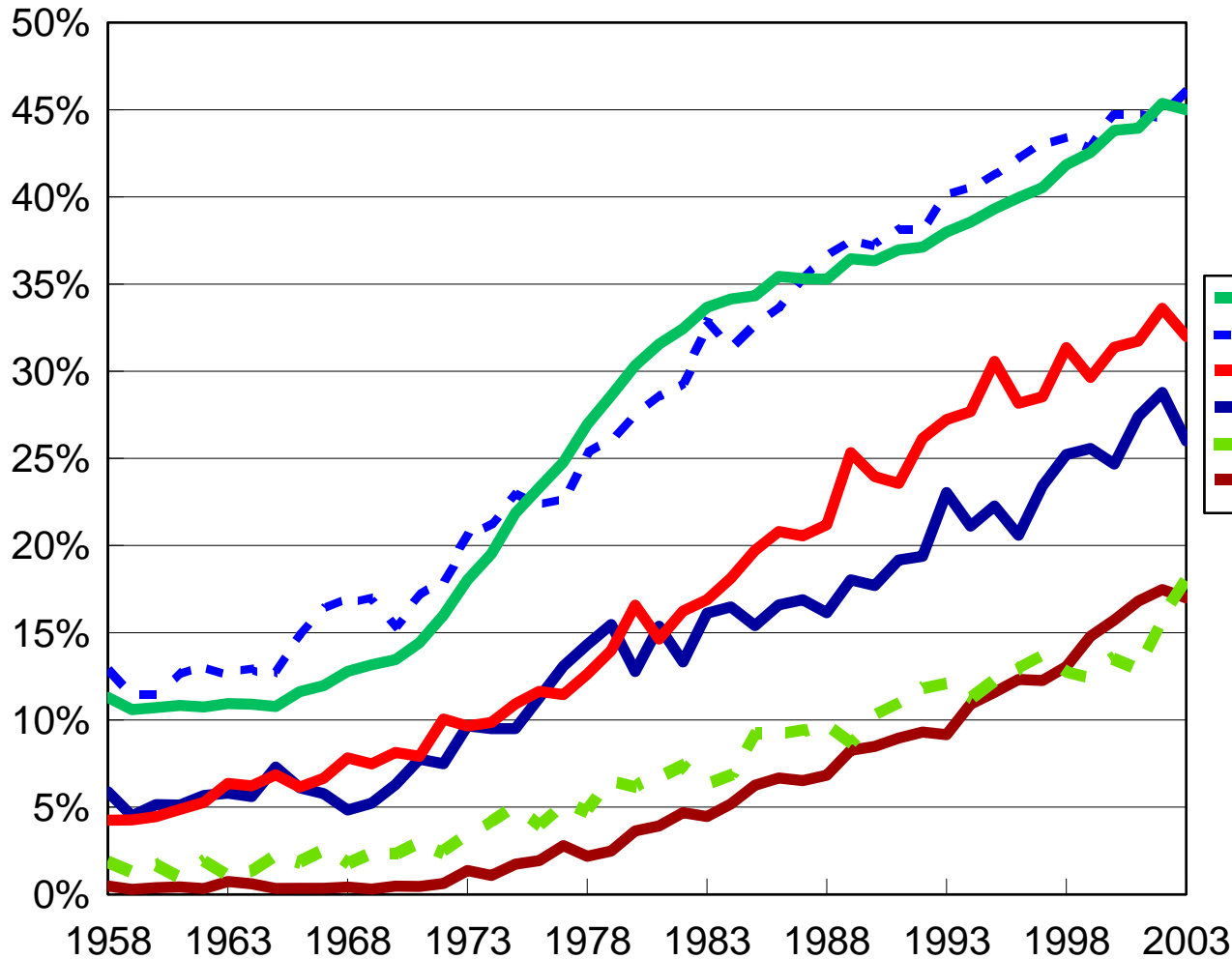
- Women bring ideas and approaches that enrich and advance physics. Yet . . .
 - They are *SCARCE*.
 - Senior women are *VERY SCARCE*.
- Some woman has to be the *FIRST ONE* in each department, subfield, program committee, directorship, *etc*
- A classically forbidden state,
- Often meeting colossal resistance

Percent of Bachelor's Degrees Earned by US Women is Rising, but Physics Trails the Pack (1966-2001)



Source: National Center for Education Statistics. Data for Academic Year 1999 were not available.
 Compiled by AIP Statistical Research Center. 2004 data from NSF 07-315.

Rising Female Percentage of Ph.D.s in STEM: Physics is at the Low End (1958-2003)



2005

47% Bio

45% All

34% Chm

27% Math

18% Eng

16% CS

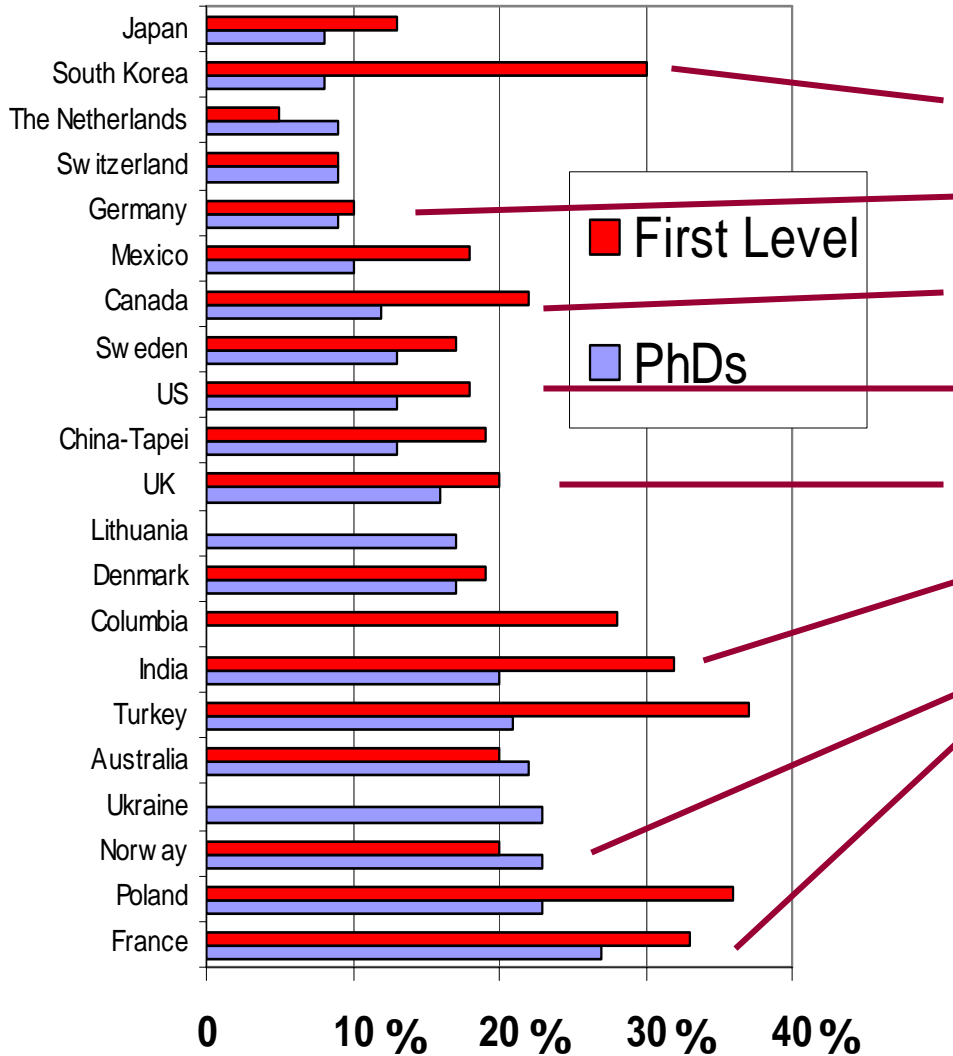
15% Phy

All Fields	43 K
Biological Sciences	7.4 K
Chemistry	2.1 K
Mathematics	1.2 K
Physics	1.3 K
Engineering	6.4 K

National Science Foundation. Data compiled by AIP Statistical Research Center.

& NSF 07-315

Large International Variability in Percentage of Physics Degrees to Women



- **Korea**
- **Germany**
- **Canada**
- **USA**
- **United Kingdom**
- **India**
- **Norway**
- **France**

From R. Ivie et al "Women Physicists Speak" (2002), in Women in Physics, AIP Conf. Proc. 628

A "Glass Ceiling" in All Countries



Source: *Economist* 7/05

- Very few women in leadership positions
- Very few women professors
- Some assistant and associate professors
- Several post-docs
- More graduate students
- Even more undergraduates
- **Efforts by women & men are helping some women through the glass ceiling into leadership in some countries**

IUPAP's Women in Physics Conferences:

I Paris, 2002; II: Rio, 2005



Paris 2002
~300 physicists from
65 countries; 15% men



Rio 2005
~150 physicists from
~40 countries; 7% men



Women in Physics: The Third IUPAP International Conference



- **Seoul, Korea: October 8-11, 2008**
- **Goal: >300 participants in >3-person teams from 70 countries; (15%-20% men)**
- **Multiply diverse U.S. delegation is forming, led by**
 - **Zhenya Zastavker, Olin College**
 - **Luz Martínez-Miranda, University of Maryland, CP**
 - **Renee Horton, University of Alabama**
- **Application deadline May 15, 2008**
- **Fundraising underway to support travel from US & developing countries: sponsors needed!**

International web site: icwip2008.org ; US web site: uswip.org

Our Distinguished Panel



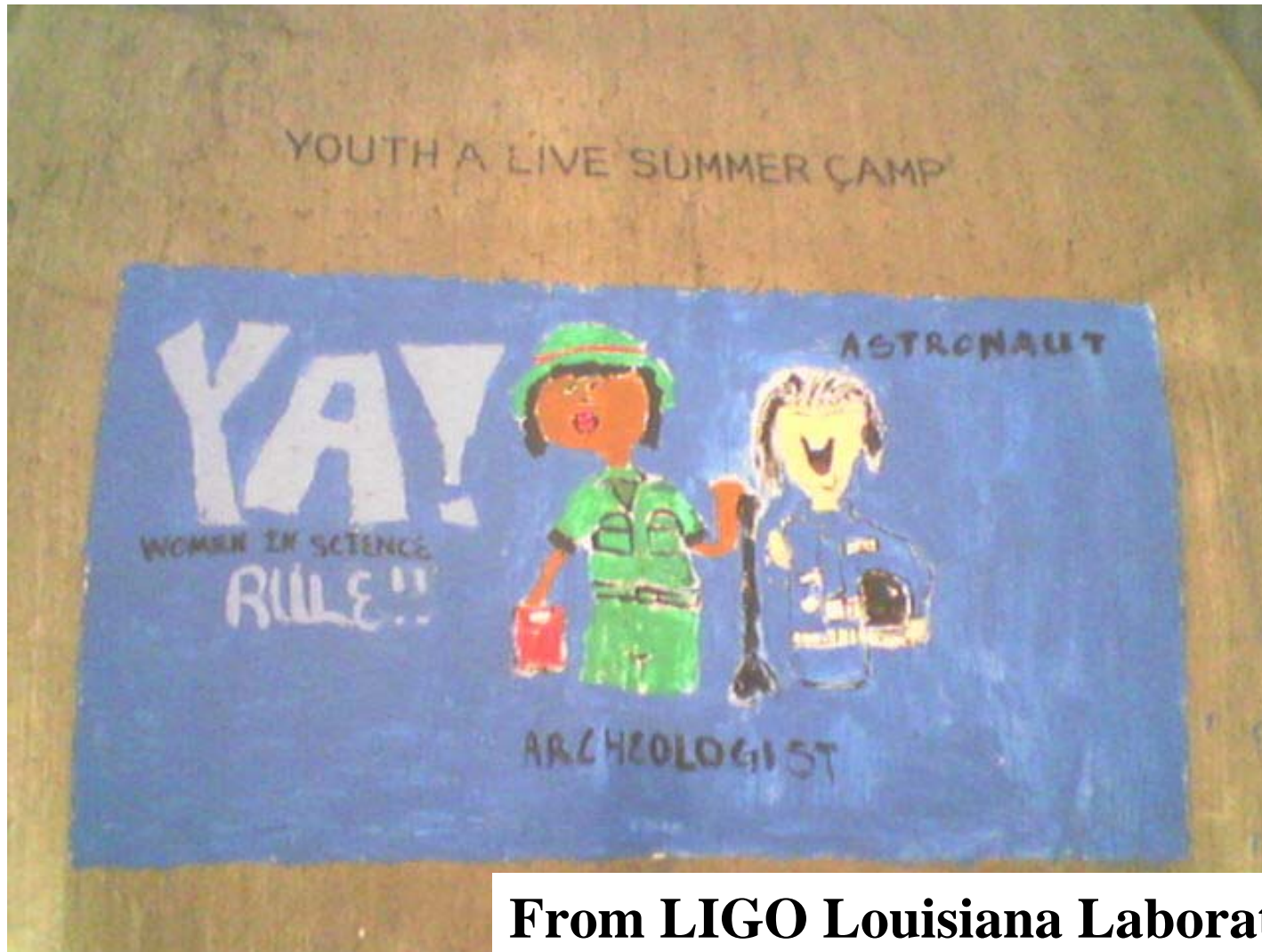
- **Arthur Bienenstock**, Stanford & APS President, *The APS 2007 Meeting on Gender Equity in Physics*
- **Barbara Sandow**, Freie Universität Berlin; Chairperson IUPAP Working Group on Women, *Promoting Positive Images of Women in Physics*
- **Laura H. Greene**, University of Illinois, U-C, *She's a Physicist!?*
- **Ling-An Wu**, Chinese Academy of Sciences, *Women in Physics in a Rapidly Changing China*
- **Dalia Satkovskiene**, Vilnius University, Lithuania, *Women in Physics in the Baltic States Region: Problems and Solutions. Marshak Lectureship Talk*
- **Q&A and panel/audience discussion; & raffle drawing**

Some Resources



- B. K. Hartline & D. Li, eds: Women in Physics, AIP Conf Proceedings 628, 2002. **Available for free download at:**
<http://proceedings.aip.org/proceedings/confproceed/628.jsp>
- B. K. Hartline & A. Michelman-Ribeiro, eds: Women in Physics 2, AIP Conf Proceedings 795 (November 2005) in Press. **Available for free download at :**
<http://proceedings.aip.org/proceedings/confproceed/795.jsp>
- Committee on Equal Opportunity in Science and Engineering (CEOSE), Broadening Participation in America's Science and Engineering Workforce (June 2005). **Available for free download at:**
<http://128.150.4.107/od/oia/activities/ceose/reports/ceose2004report.pdf>
- **CEOSE 2006 Biennial Report**, **Available for free download at:**
http://www.nsf.gov/pubs/reports/2006_biennial_report.pdf
- "*Women, Minorities, and Persons with Disabilities in Science and Engineering*," NSF-07-315 (Feb '07) see <http://www.nsf.gov/statistics/wmpd>

Enthusiastic Student Mural: "Women in Science RULE!!!"



From LIGO Louisiana Laboratory, USA