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**The Story So Far...**  
**or**  
**Momentum = mass x velocity**

**ILC Communication Workshop/Vancouver**

**18 July 2006**

**Judy Jackson**

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# Communication is key

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- If plans for an ILC are ever to move from PowerPoint to interaction point, we must first succeed at a colossal job of global communication—the most challenging one our field has ever attempted.
  - We have a long way to go, but we have already made a good start. Momentum!
-

# Working Group 6: 11/04 @ KEK

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- Hard-core lab communicators (CERN, KEK, Fermilab, SLAC) chaired by Neil Calder
  - Very efficient working group
-

# Many communicators

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- This is good.
- Need all the help we can get.
- For momentum, we need mass.
  
- **But**
  - Coordination challenge
  - Confused messages, crossed wires, mistrust
  - Duplication of effort, inefficient use of resources
  - Lack of clear purpose
  - For momentum we need velocity!



# Strategic Communication

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- Goal
- Strategy
- Tactics



# Goal

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## Build the International Linear Collider



# Strategy

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- Use **collaborative, strategic** communication to build support for constructing the international linear collider for particle physics research.

(BTW, hire a **dedicated ILC communicator** for each region.)



# Tactics

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- ✓ • Develop common ILC logo, common graphic standards



- ✓ • Publish weekly electronic ILC newsletter



- ✓ • Develop ILC Web site, build traffic



- Prepare ILC talks in many languages

- ✓ • Cultivate partnerships with industry





# More tactics



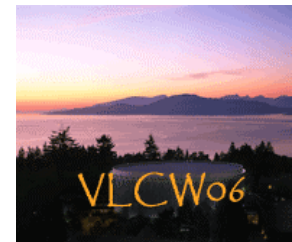
- Develop common messages, try them on audiences



- Develop answers to hard questions
  - What's it for? Why now? How much? Where?



- Get communication on the agenda at ILC workshops at all levels



# More tactics

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- Develop targeted print publications (brochures, etc.)



- Use available media (symmetry, CERN Courier, ILC Web site, lab publications, speakers' bureaus) to convey ILC message



- Participate in “World Year of Physics” project
- Consider more inspiring names.....



# Electronic newsletter

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- ✓ • Different from Web site; comes to your mailbox
- ✓ • Unites far-flung ILC family
- ✓ • Joint European, Asian, American publication
- ✓ • “Voice” of the ILC; must be well done
- ✓ • To start ASAP
- ✓ • News, announcements, features, profiles, milestones, photos, channel for GDE...

# Nine months later...

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- GDE communicators at Snowmass 2005
- First issue of ILC Newsline August 05
- A tradition of collaboration



Elizabeth Clements, Youhei Morita  
Karsten Buesser, Perrine Royole-Degieux

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# Dedicated(!) ILC communicators

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Elizabeth Clements Perrine Royole-Degieux Barbara Warmbein

Youhei Morita

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# ILC Newsline



ILC NewsLine - 13 July 2006 - Netscape

File Edit View Go Bookmarks Tools Window Help

http://www.linearcollider.org/newsline/

Home My Netscape Search

Netscape Enter Search Terms Search Highlight Pop-Up Block Off Form Fill Clear Browser History

**ilc NewsLine**

PDF For Printing Archive Search ILC Home Subscribe Contact 13 July 2006

**Around The World**

**World Cup Snapshots**

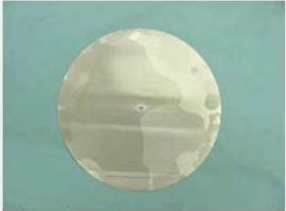


SLAC's Italian BaBarians celebrating their team's victory

If you were anywhere in Germany during the last month you couldn't have missed it: it was football world cup. Black-red-and-golden flags flying from windows, fluttering behind cars, decorating t-shirts, socks, beer mats, faces, shop windows, newspapers. If by chance you went to Hamburg you were greeted with a beautiful array of bright blue goals shining from every high-rise roof, harbour crane and all other landmarks in the city, and the public transport system didn't only tell you when the next train was due to arrive - it also had updates on the goals of every match that was on.

**Feature Story**

**The Joy of Large Grain Niobium**




Like salt crystals, niobium crystals, or grains, can be grown in either larger or smaller sizes. The individual crystals or grains can easily be seen in large-grain niobium.  
(Image courtesy of JLab)

With detailed recipes for rolling, baking and rinsing, one might think that gourmet chefs are building, designing and testing the superconducting cavities for the International Linear Collider. On a quest to design the most efficient and cost-saving cavity for the ILC, the physicists who are actually developing the recipes are not a far cry from chefs. And just as chefs experiment by mixing spices to

**Director's Corner**

**Vancouver Linear Collider Workshop/GDE Meeting**



Vancouver Linear Collider Workshop, 19-22 July 2006

Today's issue features a Director's Corner from Gerry Dugan, GDE Americas Regional Director.

The first GDE meeting in the Americas region since the Snowmass 2005 workshop will take place next week on 19-22 July, as a joint meeting with the American Linear Collider Physics Group (ALCPG) at the University of British Columbia in beautiful Vancouver, Canada. Information about the workshop and a complete agenda are [available online](#).

Done

46 issues!  
1,424 subscribers

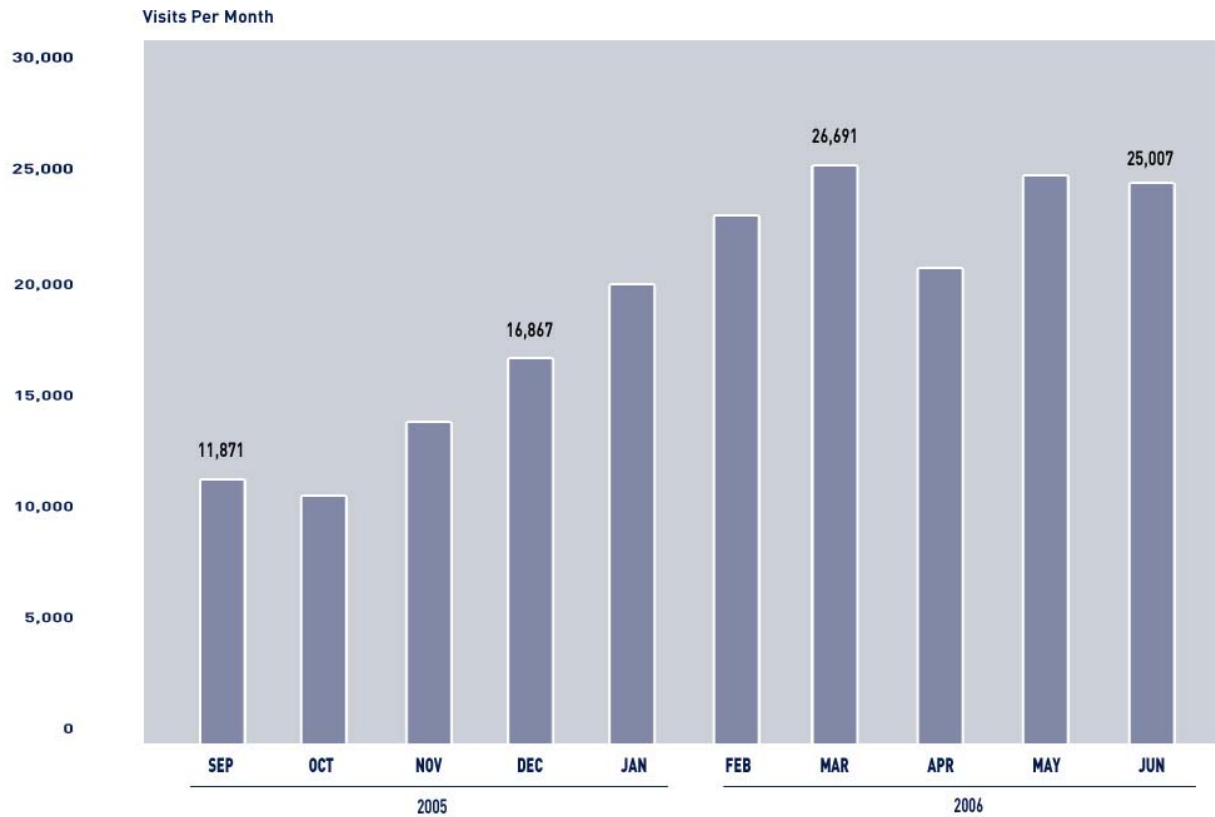
Poll says it's on  
the right track.

# Web site



The screenshot shows the ILC Home website in a Netscape browser window. The browser title is "ILC Home - Netscape" and the address bar shows "http://www.linearcollider.org/cms/". The website features a navigation menu with tabs for "FOR COLLABORATORS", "FOR THE PRESS", "FOR COMMUNICATORS", and "FOR STUDENTS AND EDUCATORS". A search bar is located to the right of these tabs. The main content area includes a large image of a landscape with a circular structure in the foreground, captioned "Vancouver Linear Collider Workshop 19-22 July 2006 (Image Courtesy of TRIUMF)". Below this image are two columns of news and features. The "Current News" column includes a link to "From Interactions.org" dated 14 July 2006, titled "CERN Council adopts European strategy for particle physics", and a link to "From Nature Magazine" dated 12 July 2006, titled "Rushed decision on collider would limit useful options". The "Features" column includes a link to "ILC NewsLine" dated 13 July 2006, titled "The Joy of Large Grain Niobium", and a link to "Town Hall Meeting at VLCW06". A sidebar on the left contains a list of links such as "What is the ILC?", "Global Design Effort", "Talks", "Reports and Statements", "ILC Jobs", "ILC in the News", "Images & Graphics", "Around the World", "Calendar", "Glossary", and "Contacts". At the bottom of the sidebar is the "ILC NewsLine" section with a "View Current Issue" link. The browser's status bar at the bottom shows "Done".

# Web visits





# What a year for particles!



From KEK:  
Interim ILC Report

PREPUBLICATION COPY  
SUBJECT TO EDITORIAL CORRECTIONS

Revealing the Hidden Nature of  
Space and Time

*Charting the Course for  
Elementary Particle Physics*

Committee on Elementary Particle Physics in the 21st Century

Board on Physics and Astronomy

Division on Engineering and Physical Sciences

NATIONAL RESEARCH COUNCIL  
OF THE NATIONAL ACADEMIES

**OPEN SYMPOSIUM ON  
EUROPEAN STRATEGY  
FOR PARTICLE PHYSICS**  
*under the aegis of the CERN Council Strategy group*

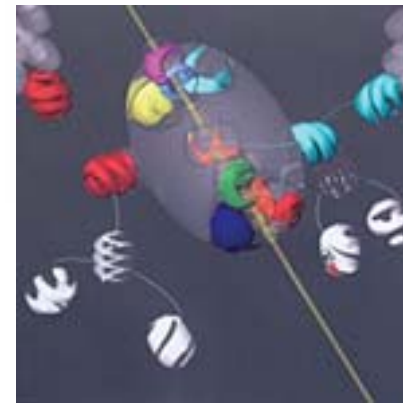
**January 30<sup>th</sup> - February 1<sup>st</sup>, 2006**  
**Laboratoire de l'Accélérateur Linéaire  
Orsay, France**  
<http://symposium.lal.in2p3.fr>

**Scientific Committee**  
Torsten Åkesson (chair)  
Roy Aleksan  
Sergio Bertolucci  
Alain Blondel  
Matteo Cavalli Sforza  
Rolf Heuer  
Frank Linde  
Michelangelo Mangano  
Ken Peach (chair)  
Ewa Rüdiger  
Bryan Webber

**Local Organizing Committee**  
Jean Eric Campagne  
Christian Hell  
Hélène Kérec  
Nicole Mathieu (chair)  
François Richard  
Guy Wormser  
Zhiqing Zhang

**Secretary**  
Catherine Bourque  
Ottaviano Eugeni

IN2P3 Institut de physique nucléaire  
CEA Commissariat à l'énergie atomique  
CERN  
LAL Laboratoire de l'Accélérateur Linéaire



# DQU released 8 May



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http://interactions.org/quantumuniverse/qu2006/

Home My Netscape Search Customize...

Netscape Enter Search Terms Search Highlight Pop-Up Block Off Form Fill

## DISCOVERING THE QUANTUM UNIVERSE

THE ROLE OF PARTICLE COLLIDERS

HOME CONTENTS ABOUT THE REPORT SEND A POSTCARD RESOURCES

### Introduction

**Discovering the Quantum Universe**

Right now is a time of radical change in particle physics. Recent experimental evidence demands a revolutionary new vision of the universe. Discoveries are at hand that will stretch the imagination with new forms of matter, new forces of nature, new dimensions of space and time. Breakthroughs will come from the next generation of particle accelerators — the Large Hadron Collider, now under construction in Europe, and the proposed International Linear Collider. Experiments at these accelerators will revolutionize your concept of the universe.

### Contents

- Executive Summary: **Lighting Out for the Terascale**
- Overview: **Discovering the Quantum Universe**
- Discovery Scenarios
- Conclusion

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# R&D Caucus Briefing 8 May



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Office of Science



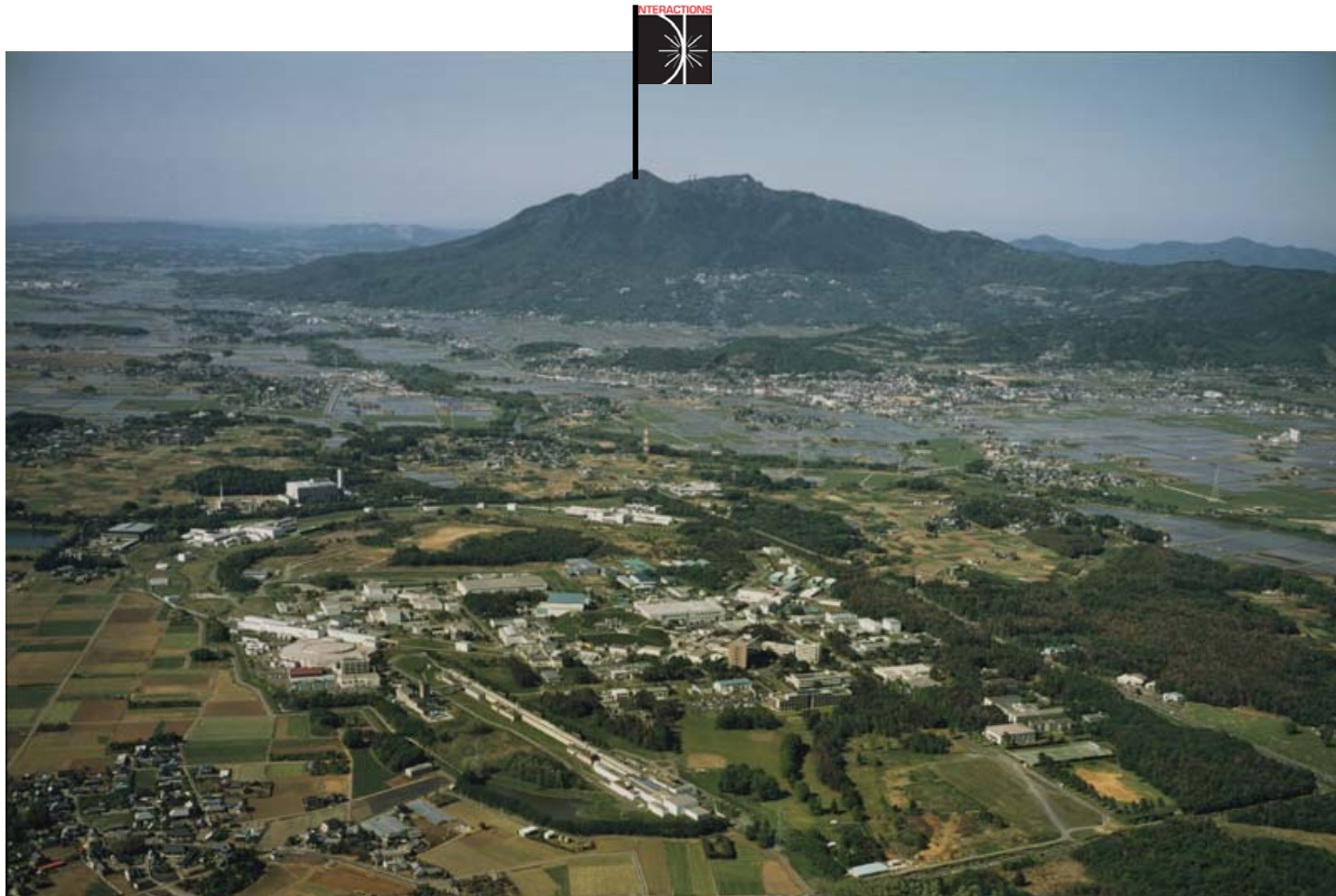
# Talks, visits, lectures....

- EPP2010 Committee
- ALCSG
- Norm Augustine
- Users' organizations
- GDE director, lab directors
- Funding agencies
- Lobbyists
- Many of you

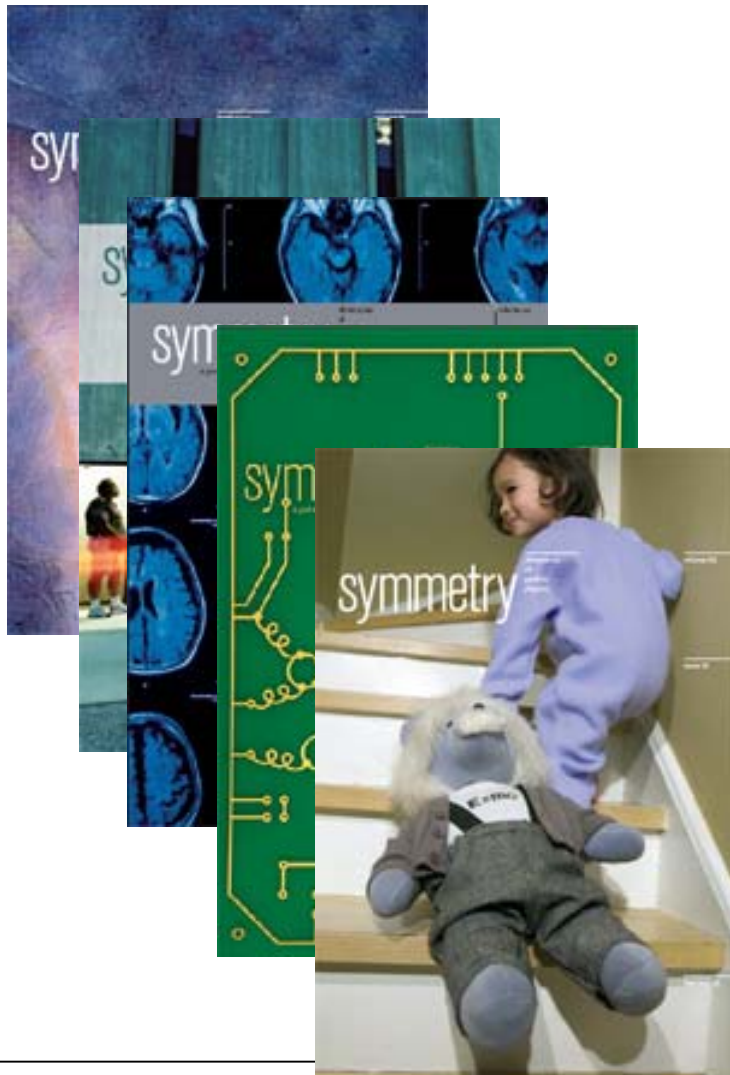


# ILC InterActions Mtg, 29 May

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# Symmetry magazine

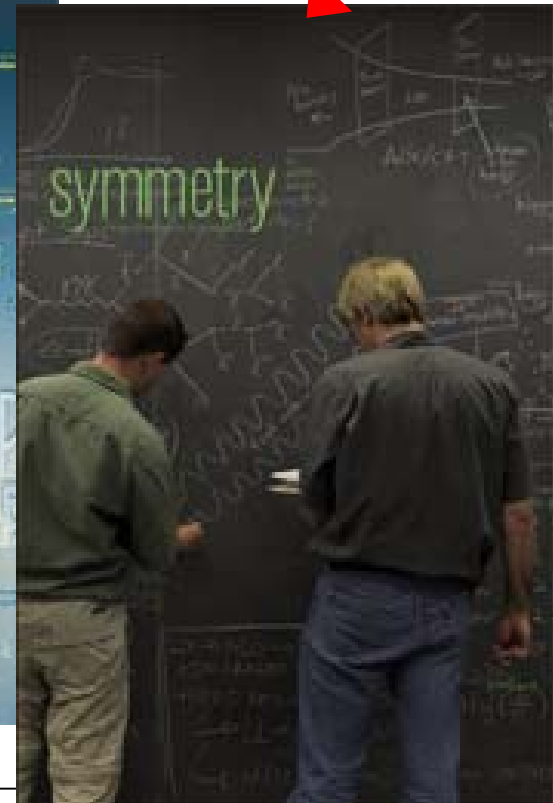


After only one year of publication, US calls for doubling physics budget!

# ILC Covers



Starting with this issue, symmetry goes to all members of Congress

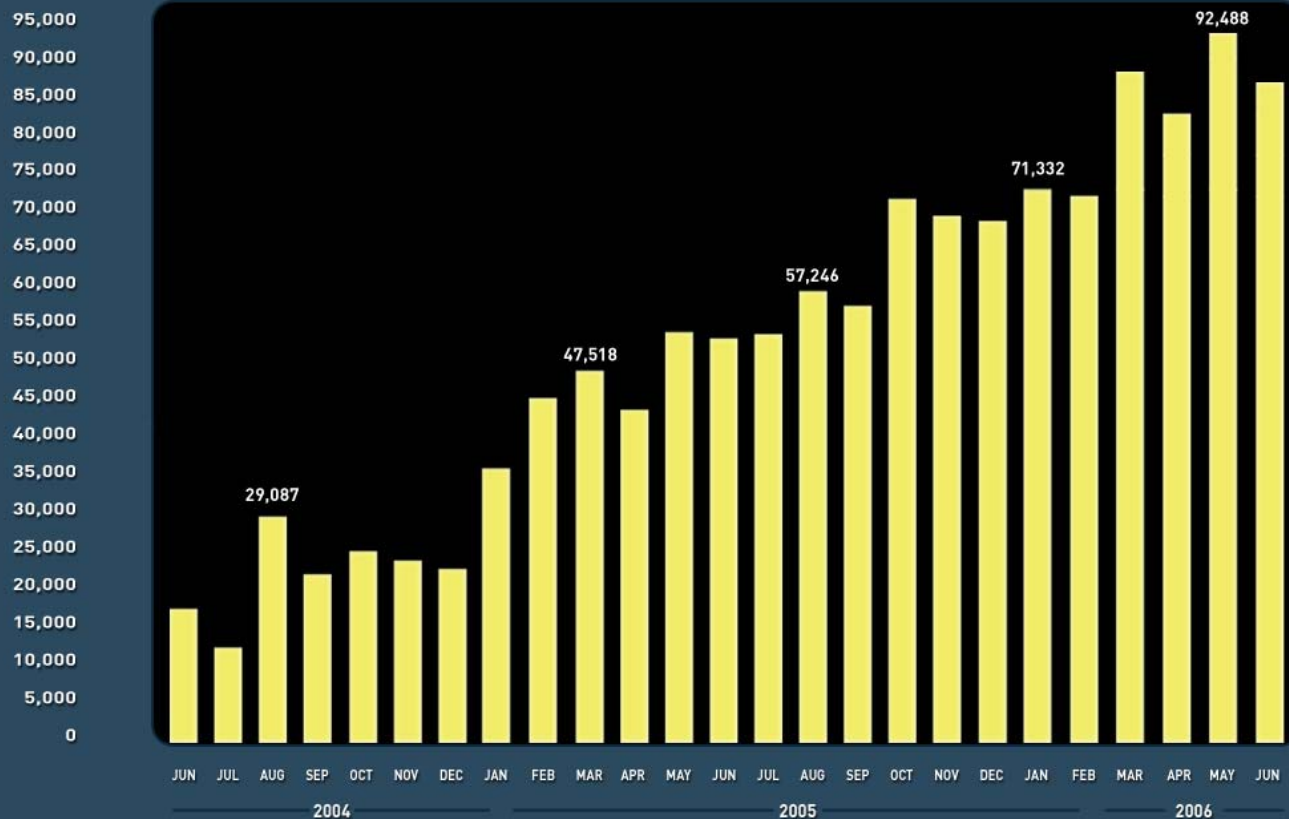


# Interactions Web site



INTERACTIONS.ORG  
Particle Physics News and Resources

Visits Per Month



Visits/month



# Even the New York Times



A26

YT

THE NEW YORK TIMES EDITORIAL/LETTERS THURSDAY, MAY 18, 2006

thus nurture them with another of his

Editorial Observer/VERLYN KLINKENBORG

## Renewing America's Commitment to Research in High-Energy Physics

In October 2003, I gave an evening talk at the Fermi National Accelerator Laboratory in Batavia, Illinois. The subject was nature on the familiar scale, the kind embodied in the restored prairie on the Fermilab campus — some 1,200 acres of compass plant and rattlesnake master and other species. But it's impossible to visit a place like Fermilab without thinking about nature on another dimension, the subatomic one being studied in the Tevatron collider, which looks from the sky like an enormous, moated ring.

In the Tevatron, subatomic particles are accelerated to extremely high speeds and crashed into each other within a detector chamber. That afternoon, I clambered through

the scaffolding around the detector chamber as scientists tried to explain to me what it all meant. To me it looked like an incomprehensible array of electronics several stories high. The detector's purpose is to capture a computerized image of the debris of each antiproton-proton collision. The particles that emerge — varieties of quarks and mesons, for instance — seem at first to have nothing to do with nature as we know it on the human scale.

Except, of course, that they have everything to do with how the universe itself was formed.

There is a basic rule about colliders. The smaller or more evanescent the particle you are trying to observe, the more energy it takes.

### Building the tools that can study the universe's birth.

Studying particle collisions at ever higher and higher energies is the only way to directly investigate the conditions that prevailed during the earliest microfractions of a second after the Big Bang. Moving further back in time — closer to the Big Bang — will mean bigger machines.

At Fermilab, many people were looking almost wistfully over the horizon to 2007, when the Large Hadron

Collider outside Geneva comes on line. That is where the coming generation of groundbreaking experiments will take place.

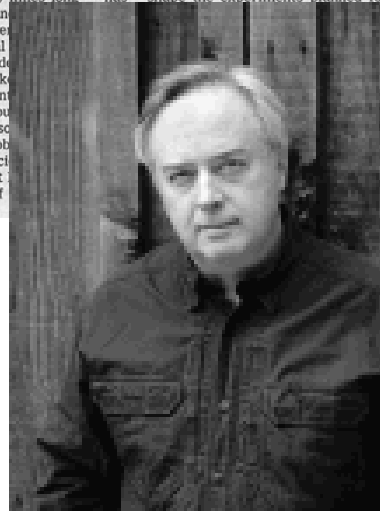
The planning for the next particle accelerator after the Large Hadron Collider — the International Linear Collider, some 20 miles long — has already begun, and debate about whether, recently, a National Science Foundation panel recommended the United States should make a commitment to build the International Collider in this country is under way.

There's no global competition in the globalization of science. The major experiment at Fermilab involves dozens, if

physicists and technicians from all over the world. The same will be true at the Large Hadron Collider, which is run by a 20-nation coalition. The research in Illinois has shaped the research planned for Switzerland, and those experiments will in turn shape the experiments planned for

the 21st century, a particle collider 20 miles long happens to be one version of what basic research looks like. High-energy physics is hard to explain to the public. It cannot be justified in simple, pragmatic payoffs for American consumers, or simple, pragmatic payoffs for politicians.

But the justification is simple. Do we continue to ask fundamental questions about the universe we live in, or do we not? To me, there is only one answer. The very soul of who we are as a species, at our very best, is expressed in our undying curiosity. And in many ways, the very best of who we are as Americans was expressed in the commitment we made to basic research in the 20th century. That commitment needs renewing.



Verlyn Klinkenberg

# We have done the remarkable.

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- Changed the way particle physics communicates around the world.
  - Changed expectations of the particle physics community for communication.
  - Created an extraordinary ILC communication team.
  - Produced publications, Web sites, reports, media unlike any others.
-

# Outside the box

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Now we have  
an opportunity  
to take it to  
the next level  
—to do something  
no one has done  
before.

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# An experiment

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- “Barish will need a deft touch to manage the GDE, a largely virtual collaboration that stretches around the world and is itself a bold experiment in how science is done.”

*Science Magazine, 26 May*

- ...and **ALSO** a bold experiment in science communication.
-

# Challenges

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- Coordination: who does what, when, where
  - Resources: never enough
  - Uncharted territory
  - “Lost in Translation”
  - Regionalism/nationalism vs. globalism
  - Will it work? (High anxiety)
  - High stakes (High emotion)
  - High price tag (sHigh )
-



# Opportunities

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- An amazing story to tell: scientific, political, geographical, technical, industrial, financial, sociological, linguistic, personal...The “War and Peace” of particle physics.
  - A tradition of collaboration
  - Many talented and dedicated communicators
  - Many available media to tell the story
  - **Our time together in Vancouver today.**
-