



ABSOLUT ILC

An Experiment in Science Communication

ALCPG/GDE Workshop/Vancouver

19 July 2006

Judy Jackson

From *Science*, May 26



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

Communication is key



- We must 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 made a good start.
-

Working Group 6: 11/04 @ KEK



Hard-core Interactions lab communicators
(CERN, KEK, Fermilab, SLAC)
chaired by Neil Calder



ILC: Many audiences

- The global ILC community
 - Our own laboratories
 - Regional HEP communities
 - Universities and institutes
 - Other fields of physics
 - Other fields of science
 - Funding agencies
 - Policy makers and opinion leaders
 - ICFA, ECFA, ACFA, HEPAP, OECD, IUPAP, JPS, EPS, APS, DPF....
 - Media
 - Industry
 - Public
 - Our neighbors
 - Students and teachers
 - ...
-

Many ILC communicators



- Lab directors
 - University presidents, provosts, Nobel laureates...
 - Chairs of organizations (ICFA, ACFA, ECFA, ILCSC, HEPAP...)
 - **Soon: GDE**
 - Funding agencies
 - Regional ILC communicators
 - Lab communicators
 - Lobbyists
 - “Outreach” committees of APS, CARE, EuroTeV, LC steering groups...
 - Our audiences themselves
-

Many communicators



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

Strategic Communication



- Goal
 - Strategy
 - Tactics
-

Goal



Build the International Linear Collider

Strategy



- 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.)

Strategy



- Use collaborative, strategic communication...
 - Collaborative means we plan and carry out communication together on a global scale, combining resources and coordinating regional communication efforts.
 - Strategic means we keep our eyes on the goal and put our communication resources where they will do the most good.
-

Tactics



- ✓ • Develop common ILC logo, common graphic standards The ILC logo consists of the lowercase letters "ilc" in a white, sans-serif font, positioned to the right of a dark blue square containing three small yellow dots.
 - ✓ • Publish weekly electronic ILC newsletter A screenshot of an electronic newsletter, showing a header with the ILC logo and several columns of text with images.
 - ✓ • Develop ILC Web site, build traffic A screenshot of the ILC website, displaying a navigation menu, a main content area with a large image, and a sidebar.
 - Prepare ILC talks in many languages
 - ✓ • Cultivate partnerships with industry
-

More tactics



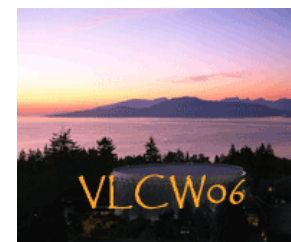
- Develop common messages, try them on audiences



- 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



- 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
-

Electronic newsletter

- ✓ • 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...



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



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

Dedicated(!) ILC communicators



Elizabeth Clements Perrine Royole-Degieux Barbara Warmbein

Youhei Morita

The Power of Communication



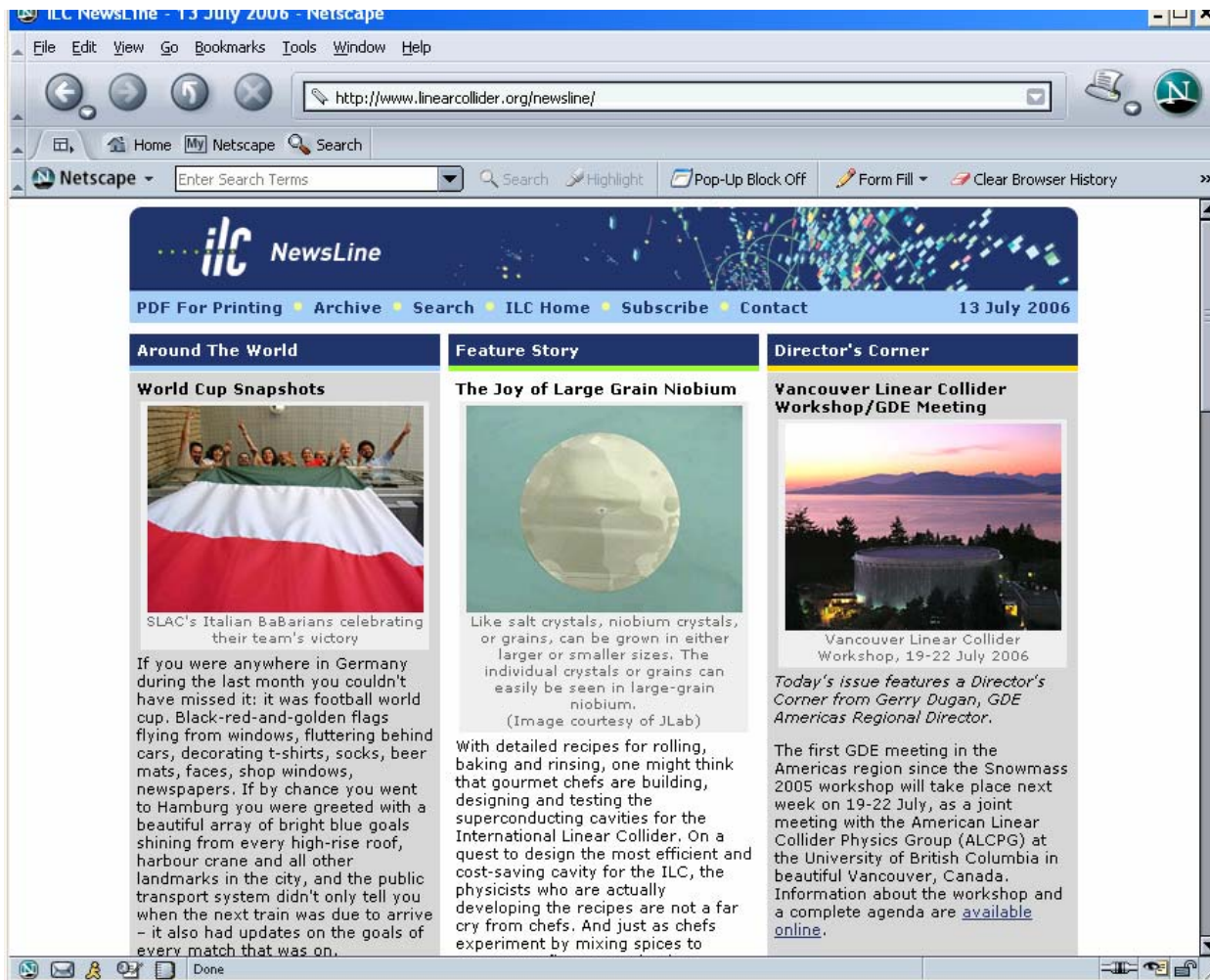
Need a power outlet?

See your ILC communication team!

They'll give you what you need to get connected—and stay connected!



ILC Newsline

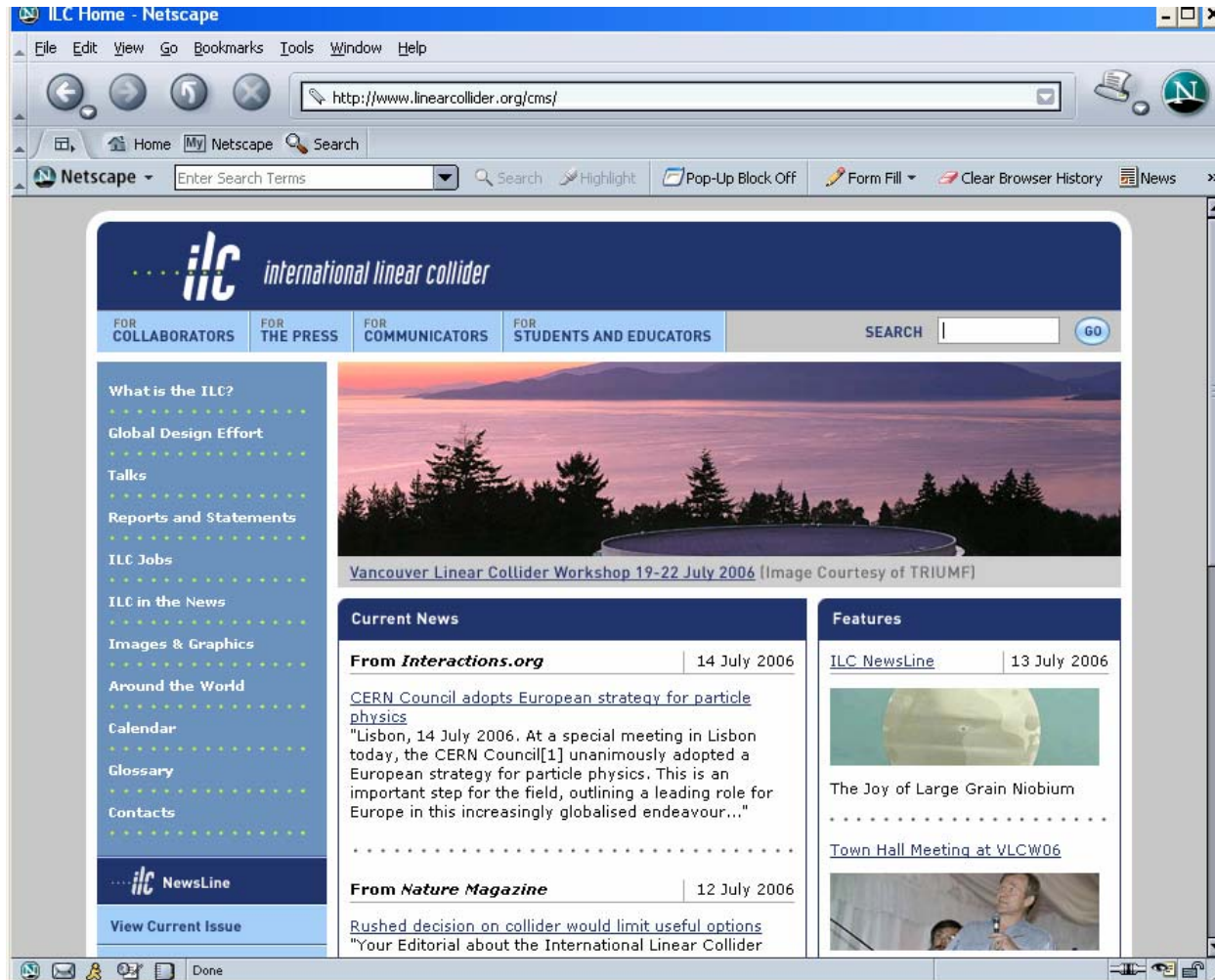


46 issues!

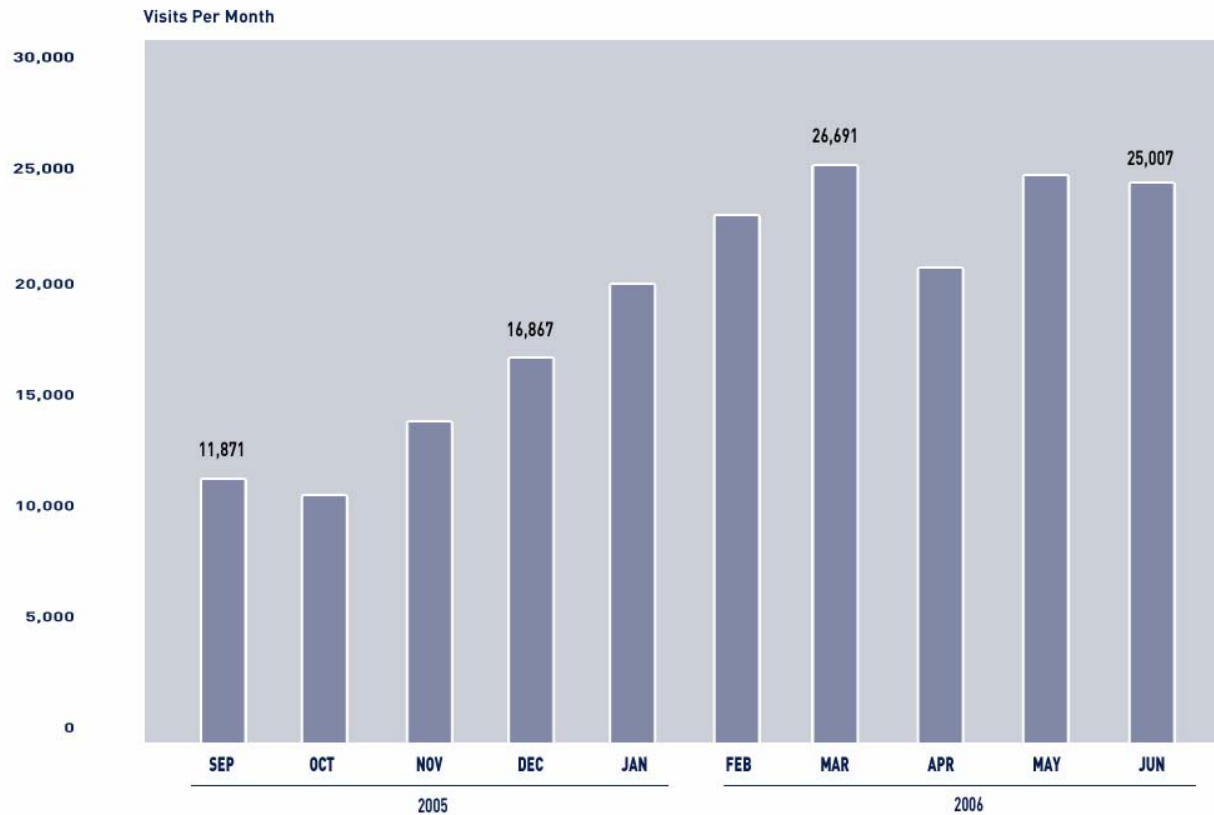
1,424 subscribers

Poll shows it's on
the right track.

Web site



Web visits



What a year for particles!



From KEK:
Interim ILC Report

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

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

Scientific Committee
Torsten Akesson (chair)
Roy Aleksan
Sergio Bertolucci
Alain Blondel
Matteo Cavalli Sforza
Rolf Heuer
Frank Linde
Michelangelo Mangano
Kenji Niwa (chair)
Ewa Rönblad
Bryan Webber

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

Sponsoring
Catherine Bourge
Catherine Courau

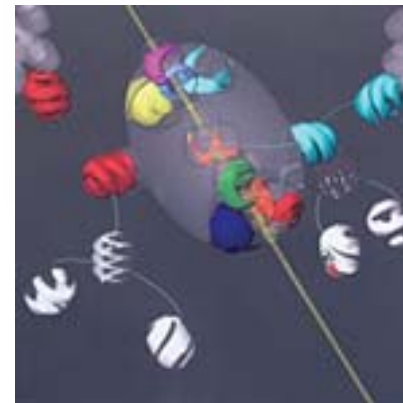
A map of Europe is overlaid on the text, with a blue and yellow color scheme.

PREPUBLICATION COPY
SUBJECT TO EDITORIAL CORRECTIONS

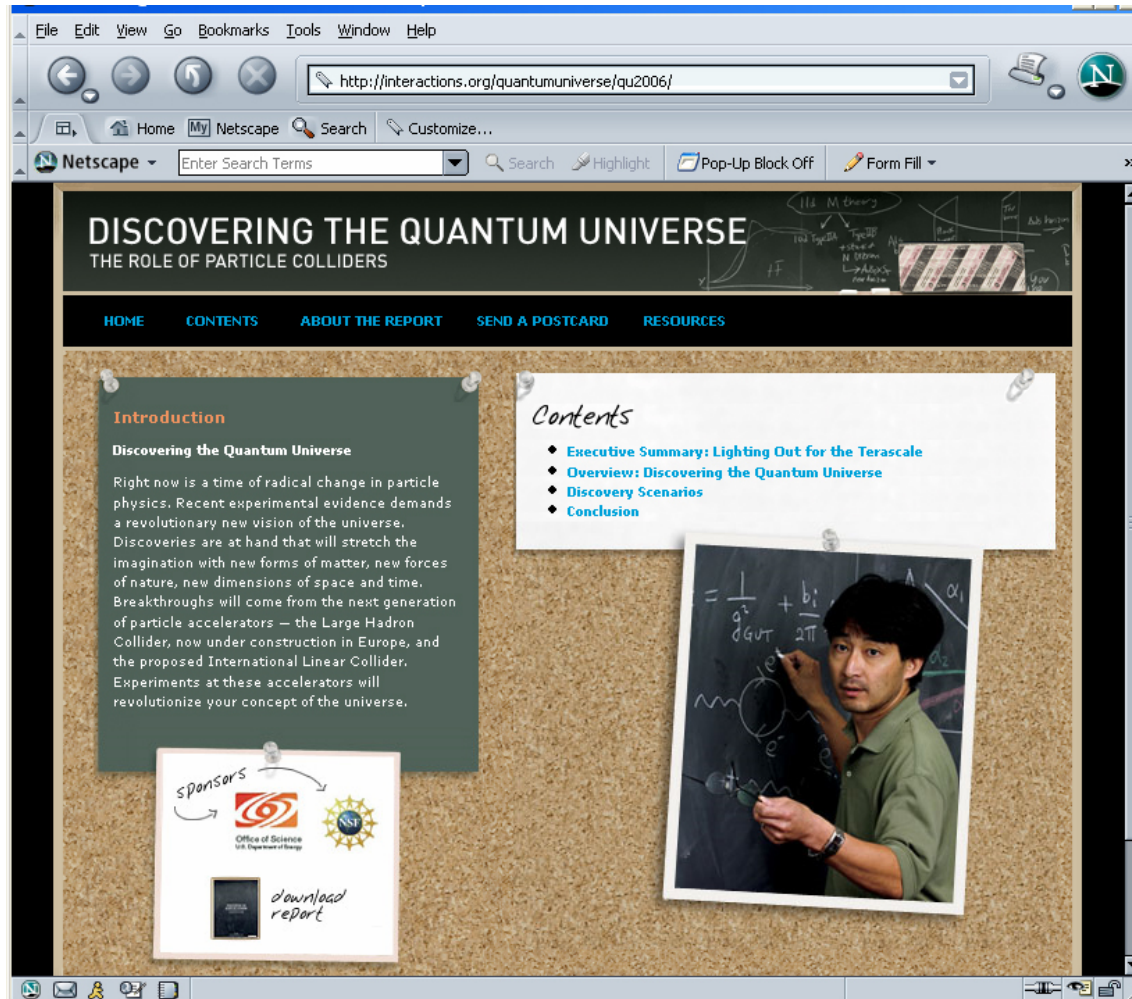
**Revealing the Hidden Nature of
Space and Time**

**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



DQU released 8 May



First 7000 copies
gone

Reprinting now

Send a postcard

(QU now in 5th printing)

R&D Caucus Briefing 8 May

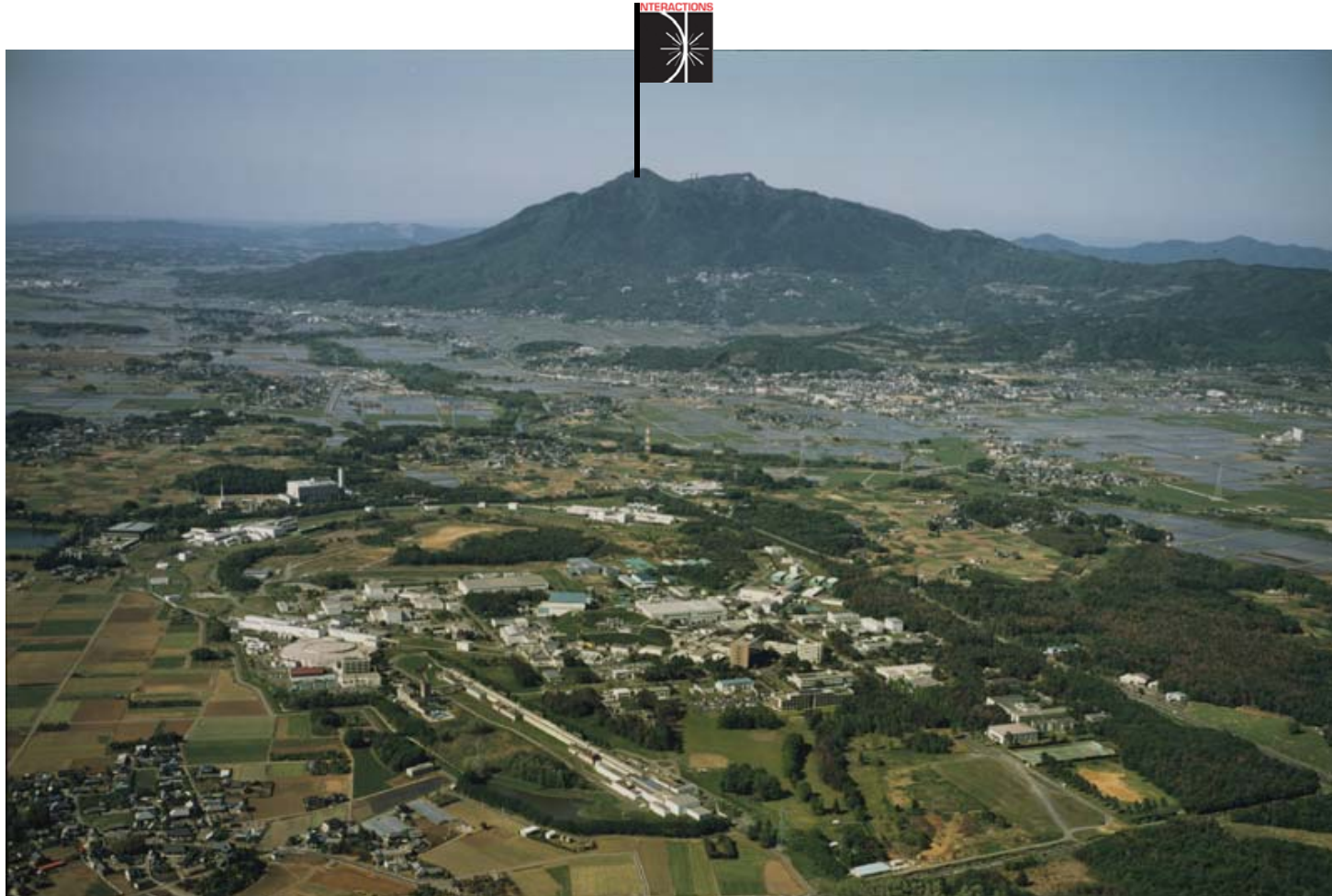


Rep. Judy Biggert
Rep. Rush Holt



Sponsored
By Fermilab,
SLAC,
Office of Science

ILC InterActions Mtg, 29 May





Talks, visits, lectures....

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

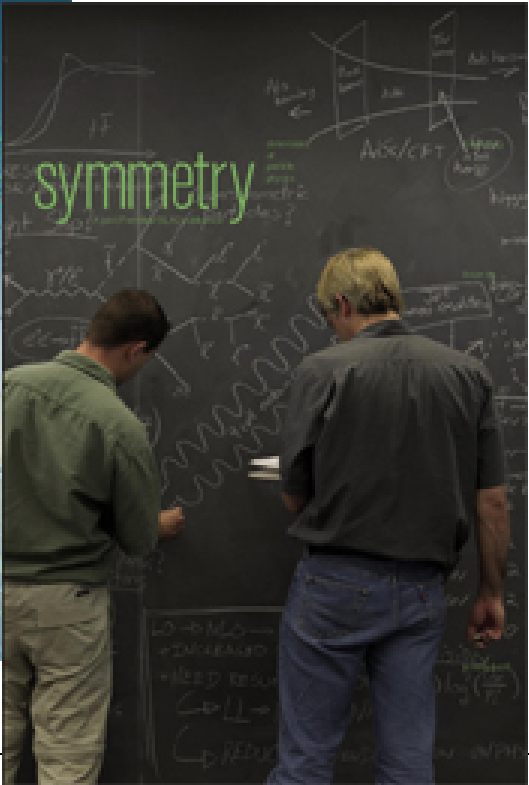


Symmetry magazine



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

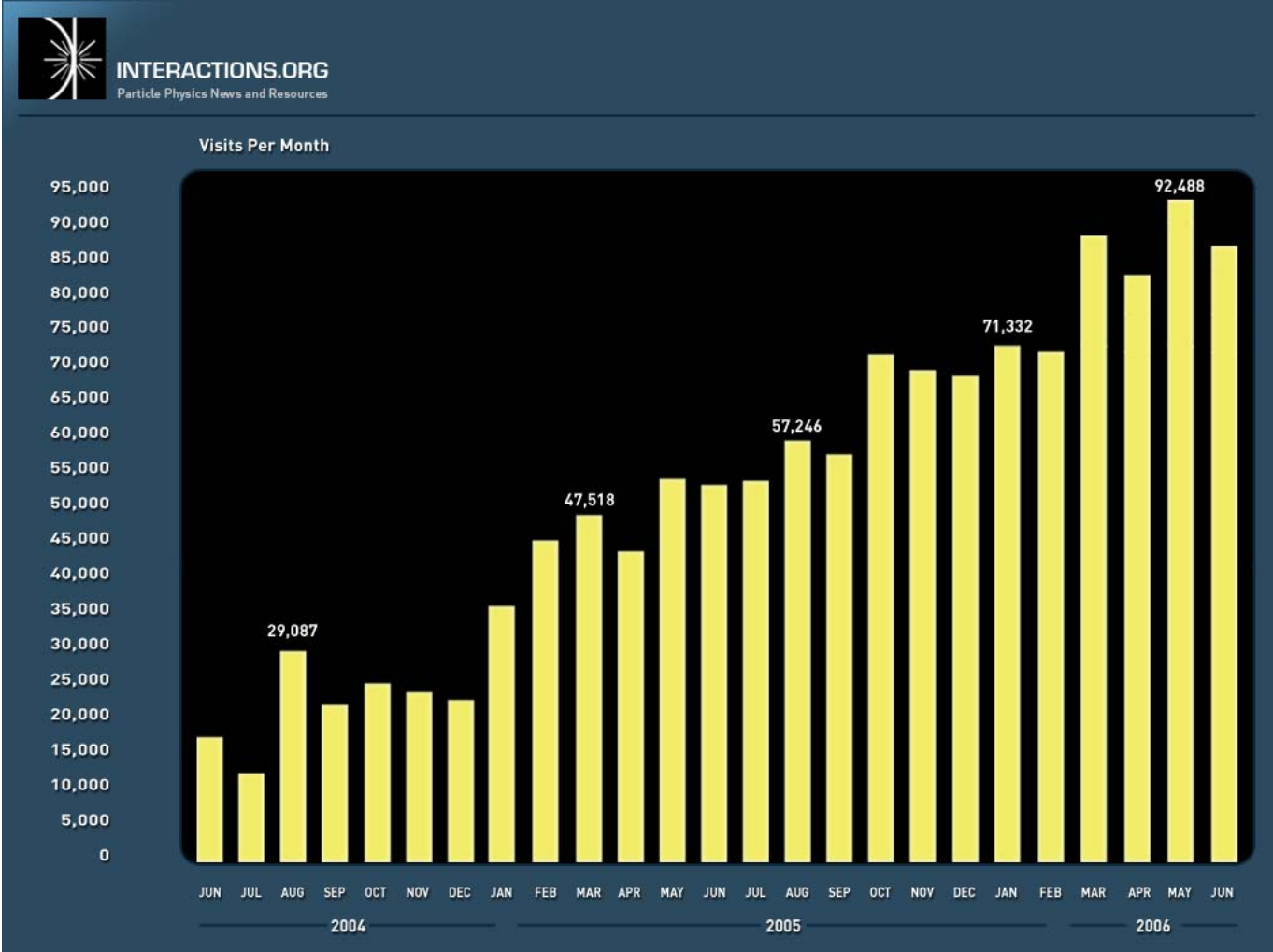
ILC Covers



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



Interactions Web site



Science, Nature, NY 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.

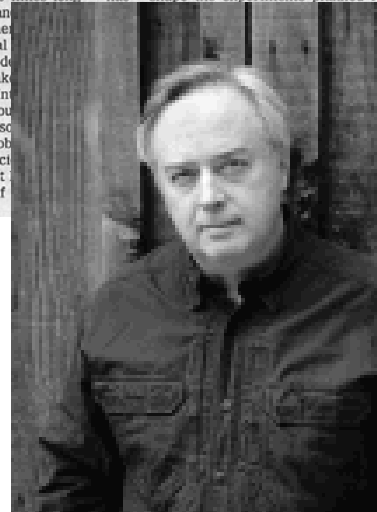
The planning for the next particle accelerator after the Large Hadron Collider — the International Linear Collider, some 20 miles long — has already begun, and debate about whether, recently, a National Science Foundation panel recommended the United States should make a concerted effort to build the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

There's no doubt about 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 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

Yesterday: ALCSEG Workshop



- ~ 50 attendees
 - Physicists, ILC communicators, ALCSEG members, Interactions members, consultants
 - Identified most critical audiences
 - Clarified key messages, identified impediments
 - Action items: Updated strategic communication plan, materials, talks...
-

We are doing the remarkable.



- Interactions collaboration has changed the way particle physics communicates around the world
- With QU, DQU, symmetry, changed expectations of particle physics communication
- Within the GDE, an extraordinary communication team.



Outside the box



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

Soon: A household word?



Challenges

- 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)
 - Price tag (High)
-



Opportunities

- 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
 - Strong support for communication from the funding agencies, lab directors, GDE director
-



Remember...

- Science first!
 - We are part of the world particle physics community. (The Terascale is big enough for all of us.)
 - One size may not fit all regions.
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21st Century Particle Physics



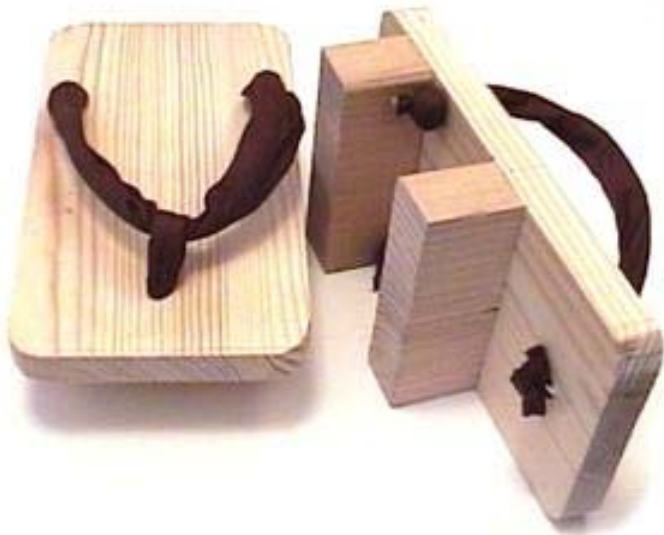
A universe of dark matter and dark energy!

Extra dimensions!

Discoveries ahead will revolutionize our picture of the universe!

We get to tell the story!

In each others' shoes



InterActions Mission



“Not only to strengthen the international science of particle physics, but to set visible footprints for peaceful collaboration across all borders.”
