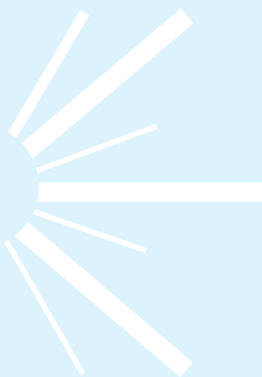


Picturing

the world's
particle physics
laboratories



By Katie Yurkewicz

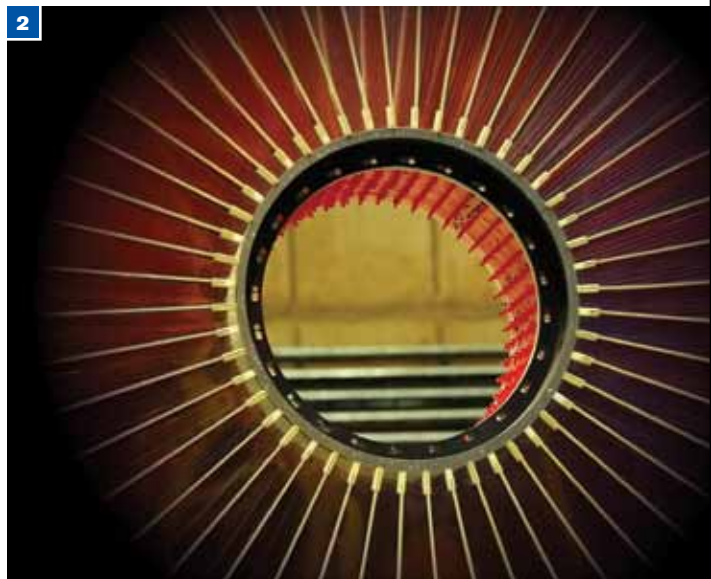


Top Three Global Jury Winners

1 **Photographer: MIKEY ENRIQUEZ**
Laboratory: TRIUMF
The inner detectors of TRIUMF's 8Pi nuclear-physics experiment.

2 **Photographer: HANS-PETER HILDEBRANDT**
Laboratory: DESY
This highly symmetrical image of a particle detector fascinated DESY's jury with its evocation of a large eye. It also won first place in the Peoples' Choice competition.

3 **Photographer: HEIKO RÖMISCH**
Laboratory: DESY
The coils of two quadrupole magnets resemble kissing mouths.



More than 200 photographers collided this summer with the past, present, and future of particle physics. The first Global Particle Physics Photowalk took photographers behind the scenes at five particle physics laboratories: CERN in Switzerland, DESY in Germany, Fermilab in the USA, KEK in Japan, and TRIUMF in Canada.

Photographers glimpsed the future of particle physics through visits to accelerator test facilities at CERN, Fermilab, and KEK. Fermilab's anti-matter factory and TRIUMF's isotope facilities for physics and medicine revealed the current state of the art in particle and nuclear physics. And at DESY, photographers viewed physics' past and present simultaneously while visiting the former underground home of the HERA-B detector, where new particle detectors are now built and tested.

"The reason we decided to do the photowalk was to invite people in who might have a different way of looking at things at our laboratory than the people who work here every day," says James Gillies, head of communication at CERN.

Following the August 7 event, which was organized by the InterAction Collaboration, participants submitted thousands of photographs to the laboratories for local competitions. Each laboratory selected its top photographs by jury or by staff vote, and will exhibit the winning photos starting this month.

"As scientists, we're excited by our work and our laboratory environment. What was amazing about this event was the opportunity to share

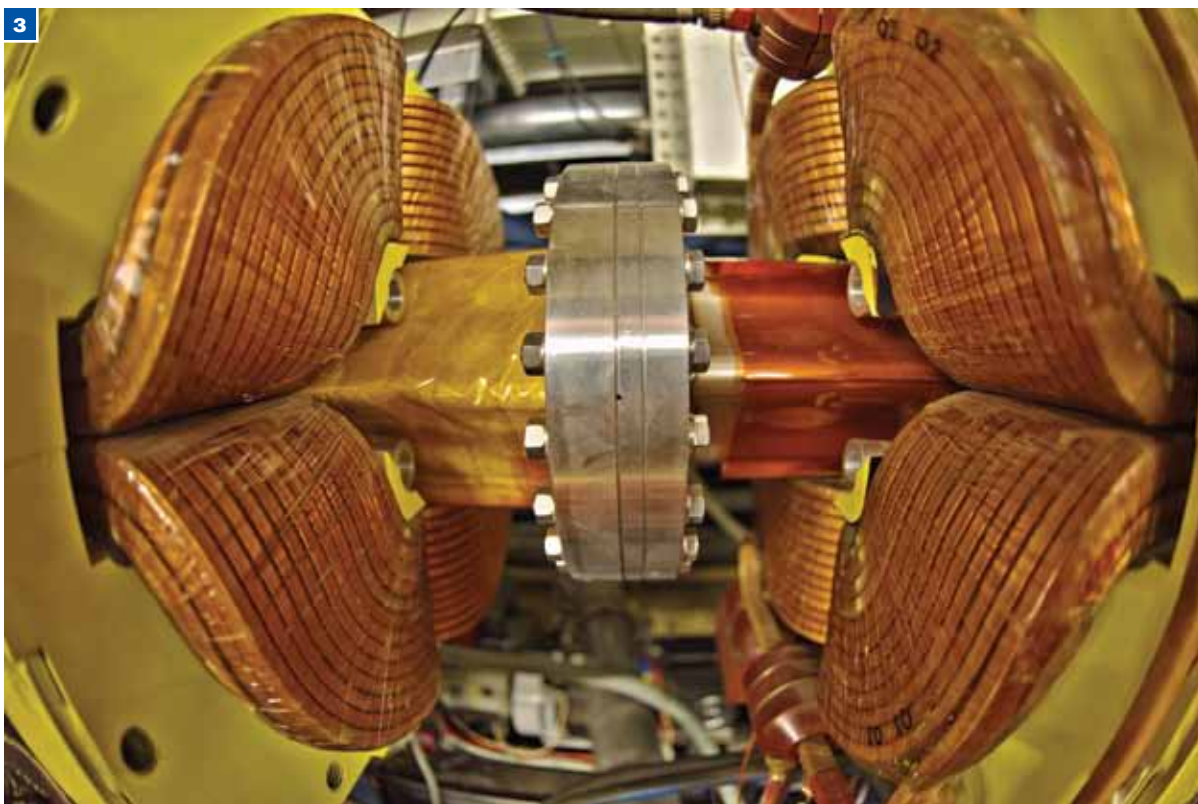
that experience with the people who support and benefit from the research we do," says Nigel Lockyer, director of TRIUMF.

In the spirit of friendly competition, each laboratory selected three photographs to compete in two global competitions: a "people's choice" online vote and a selection by an international panel of judges. The photographs in this gallery represent the 15 finalists for the global competitions.

The people's choice winner was Hans-Peter Hildebrandt's sunburst image of a particle detector at DESY, while the international jury selected Mikey Enriquez's black-and-white photograph of a nuclear physics experiment at TRIUMF.

"I am an amateur nature photographer, and the subject—technology—was a great challenge," said Hildebrandt, a lead technician at a German manufacturing firm. "You don't get to see things like accelerators in tunnels very often, and I am really glad I took part in the photowalk."

More than 100 top photographs from the Particle Physics Photowalk are available online at: www.flickr.com/photos/interactions_photos



gallery: physics photowalk

1 **Photographer: KEISUKE MORI**
Laboratory: KEK

The Belle detector at KEK, which records the collisions of electrons and positrons from the KEKB accelerator.

2 **Photographer: MATTHIAS TESCHKE**
Laboratory: DESY

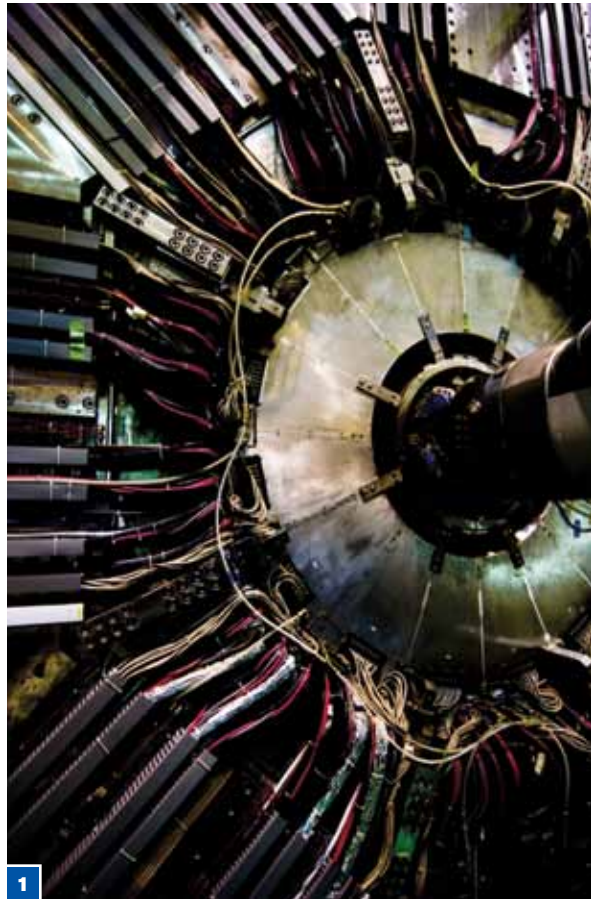
Classic image of HERA's accelerator tunnel at DESY, which conveys a sense of space, almost infinity, and inspires curiosity about what's around the corner. This was the third-place winner in the Peoples' Choice competition.

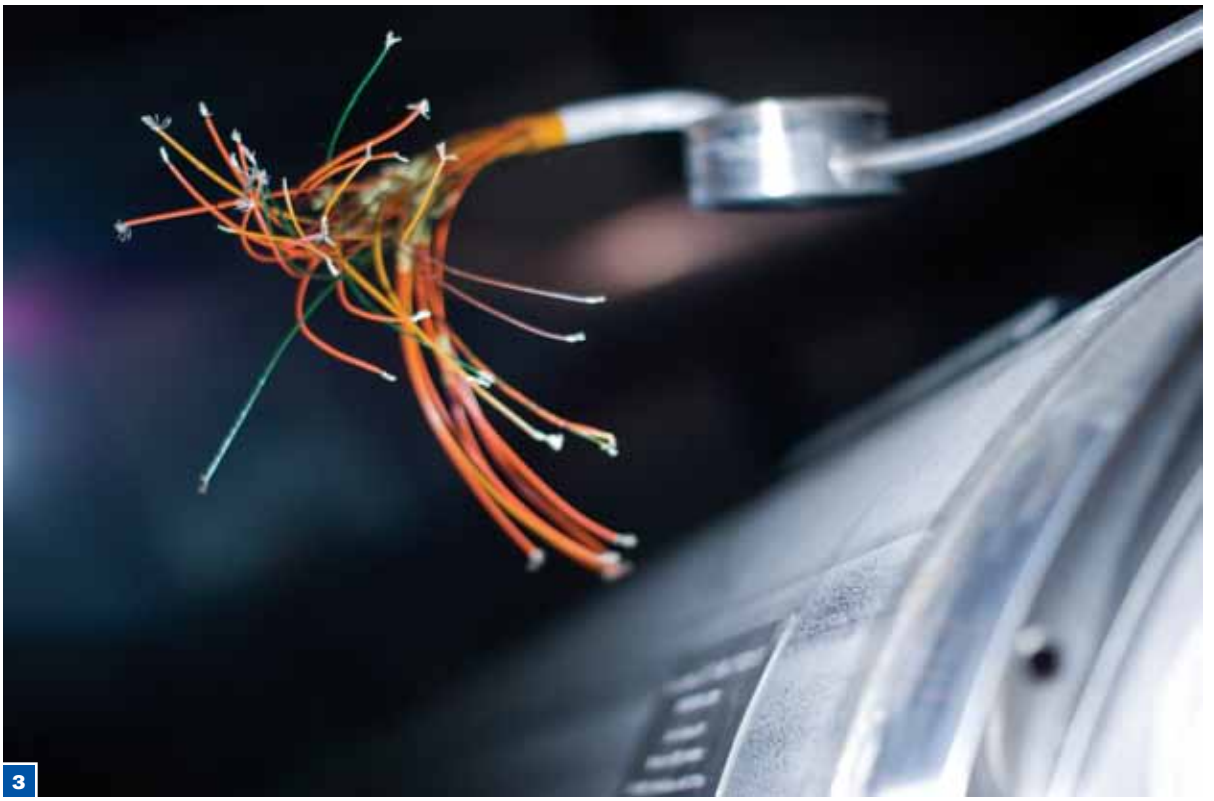
3 **Photographer: CHRISTIAN STEFANI**
Laboratory: CERN

Electrical cable connected to a valve that is designed to avoid pressure damage in a Large Hadron Collider magnet at CERN.

4 **Photographer: TONY REYNES**
Laboratory: FERMILAB

Operator on shift in Fermilab's Main Control Room, where scientists monitor the laboratory's accelerators 24 hours a day, seven days a week. This image won second place in the Peoples' Choice competition.

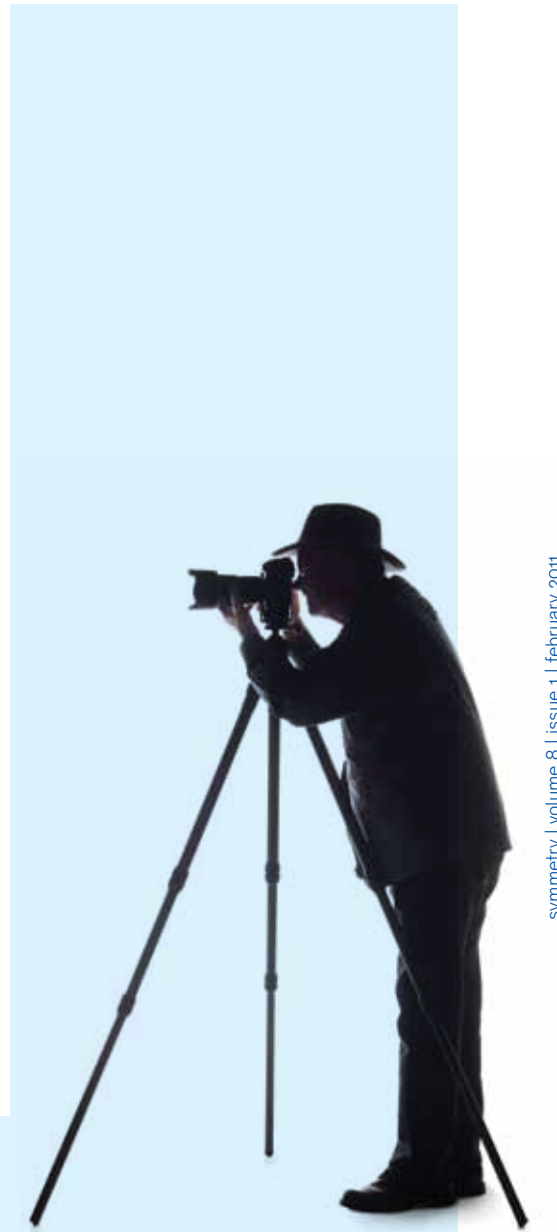




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gallery: physics photowalk



1 **Photographer: YUKI HAYASHI**

Laboratory: KEK

Researchers working through the weekend in KEK's Accelerator Test Facility, which focuses on generating low-emittance beams essential for a future electron-positron linear collider.

2 **Photographer: DIEGO GIOL**

Laboratory: CERN

Connection pipe from a spare Large Hadron Collider quadrupole magnet of the type used to do the final focus of LHC beams before collision.

3 **Photographer: DIEGO GIOL**

Laboratory: CERN

Part of the test beamline for Linac4, which will be CERN's newest linear accelerator and the first link in the proton acceleration chain for the Large Hadron Collider.

4 **Photographer: KEN DUSZYNSKI**

Laboratory: FERMILAB

The Broken Symmetry sculpture at Fermilab's main entrance. The arch appears perfectly symmetric when viewed directly from below, but has carefully calculated asymmetry from other views.



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gallery: physics photowalk

1 **Photographer: ALI LAMBERT**
Laboratory: TRIUMF

Atop the world's largest cyclotron, paperclips in a fringe magnetic field stand upright. The photographer artfully captured an iconic experience of visitors to TRIUMF.

2 **Photographer: CHARLES PETERSON**
Laboratory: FERMILAB

View of the roof inside the Meson Laboratory at Fermilab. Each scalloped roof section was designed to be approximately the same width as the Tevatron accelerator tunnel.

3 **Photographer: MIKEY ENRIQUEZ**
Laboratory: TRIUMF

A digital texturing technique softens the industrial and technical landscape of TRIUMF's material-science facility.

4 **Photographer: AKIRA OMINATO**
Laboratory: KEK

Collage of the KEK particle physics laboratory in Tsukuba, Japan.



