

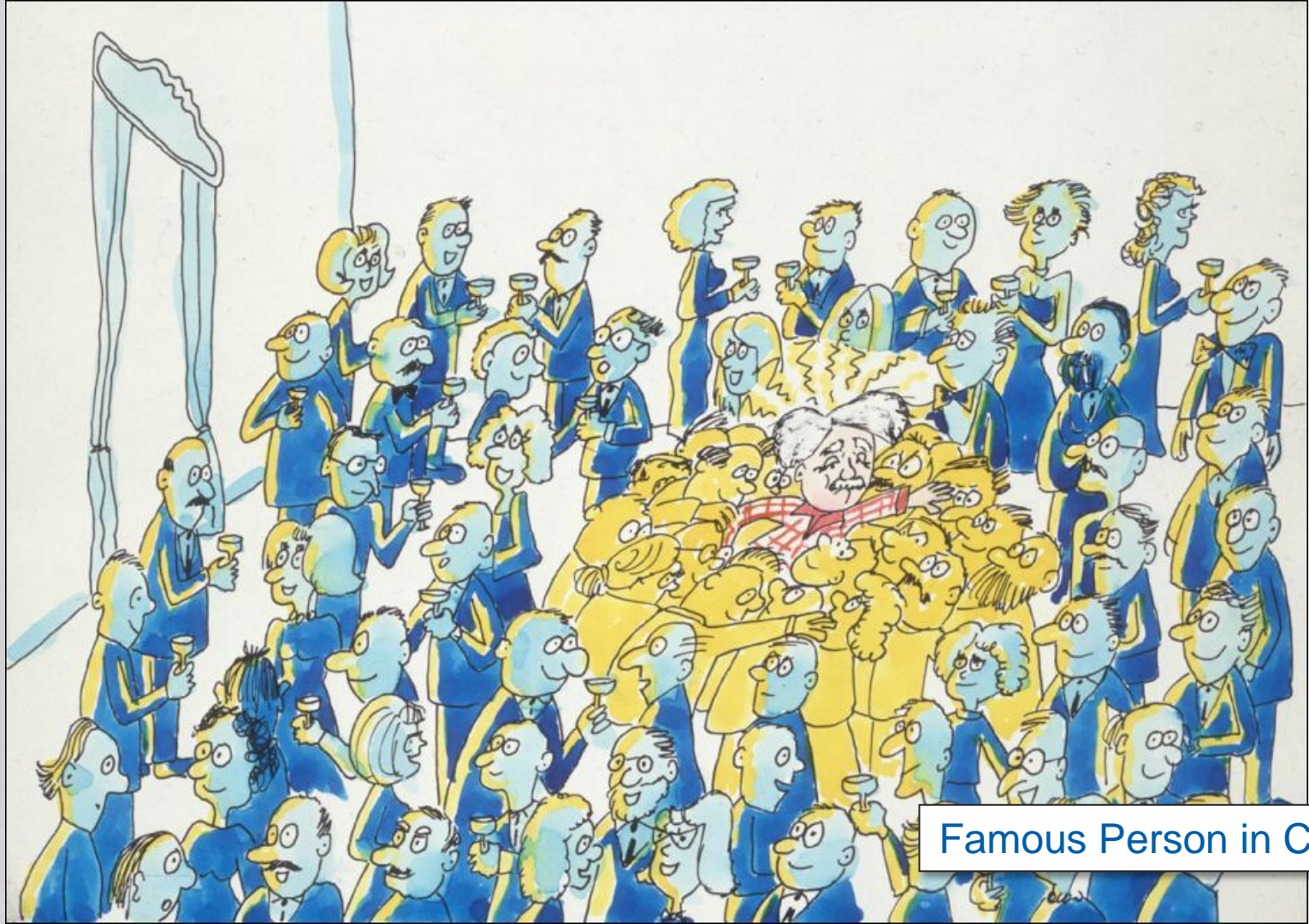


Council Seen by an Outreacher

Communicating Science for Peace

S. Goldfarb (University of Michigan)
ATLAS Education & Outreach Coordinator
19 September 2014

Analogies of the Higgs Boson



Famous Person in Crowd



Skier in Snow Field



Splash of a Milkshake



CERN Council in Session

4 July 2012



Melbourne



CERN

4 July 2012

Webcast Audience

- 450,000 watched live
- 1,000,000,000 watched rebroadcast of the video

Words Trending on Twitter

- Higgs Boson, Standard Model
- LHC, CERN
- *Comic Sans*

nature International weekly journal of science

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News & Comment | News | 2012 | September | Article

Commendations for Nature News & Comment in the 2012 Online Media Awards

NATURE | NEWS

Physicists declare victory in Higgs hunt
 Researchers must now pin down the precise identity of their new particle.

Geoff Brumfiel

04 July 2012

Physicists announce results this morning high-energy physics Switzerland. Both new boson particle giga-electronvolts, v the Higgs previous

In praise of charter schools
 Britain's banking scandal spreads
 Volkswagen overtakes the rest
 A power struggle at the Vatican
 When Lonesome George met Nora

Two independent experiments this morning high-energy physics Switzerland. Both new boson particle giga-electronvolts, v the Higgs previous

The Economist

2012 07 07 2012

A giant leap for science

Finding the Higgs boson

Wettbewerb

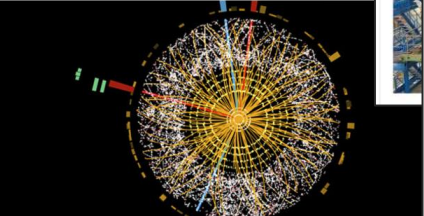
24 ORE

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Higgs-Boson

Forscher entdecken neues Elementarteilchen

Genf, 04.07.2012



Das jahrzehntelange gesuchte Higgs-Teilchen ist gefunden.

Foto: CERN

BOSON DE HIGGS: LES PHYSICIENS ONT DECOUVERT UNE NOUVELLE PARTICULE !

TAGS & LA UNE | RECHERCHE SCIENTIFIQUE

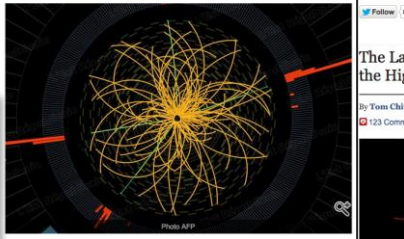


Photo AFP

04.07.12 à 07:07

478 154

123 Commentaires

Comment on this article

Higgs boson: CERN's quest to conquer the elusive God particle

Colombia.com

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★★★★★

La importancia del "partícula de Dios"

Accedi | Milano 16°

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Il 4 luglio, il bosone di Higgs si presenta al mondo. Ecco come è stata scoperta la "particella di Dio"

di Leopoldo Benacchio

4 luglio 2012 Cronologia articolo

Tweet (34) | Consigli (833) | Invia | 10 | Accedi a MyLD

E' nato il 4 luglio, il giorno dell'indipendenza americana e titolo di un famoso film, ma il **bosone di Higgs** è nato ufficialmente in Europa, al CERN di Ginevra, il più grande centro di ricerca di fisica nucleare al mondo, dove lavorano centinaia di italiani sia come dipendenti del Centro in Svizzera che del nostro Istituto Nazionale di Fisica nucleare, INFN. Clima da liquidazione da Harrods a Ginevra, code infinite per accaparrarsi un posto in una delle sale in cui veniva trasmessa la conferenza scientifica e poi la conferenza stampa con premi Nobel e altri nomi scelti da tempo nel libro mastro della storia della fisica.

L'annuncio, con tutte le precauzioni, è quello che tutti si

The Telegraph

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Tom Chivers

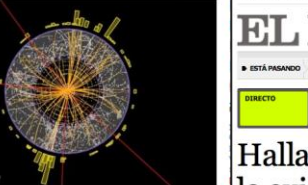
Tom Chivers is the Telegraph's assistant comment editor. He writes on science, culture and anything that crosses his mind. Read older posts by Tom here.

Follow @TomChivers 6,574 followers

The Large Hadron Collider has (almost definitely) found the Higgs boson: where next from here?

By Tom Chivers Science Last updated: July 04, 2012

123 Comments Comment on this article



A glimpse of the Higgs?

Le Monde.fr

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EN CITOYENS EUROPÉENS EN CITOYENS ESPAÑOLES

depuis 15€ (par noche por persona)

17€

Le boson de Higgs découvert avec 99,9999 % de certitude

Les plus partagés

- Préparation au doctorat et cours de physique de Nicolas Sarkozy 2525
- "Strip-tease" : Comment l'amour peut venir dans une strip-tease 303
- Alan Loden: "Strip-tease" sera une vraie formation pour un athlète de haut niveau 307
- Le Blyth ou "Pénitencier de la tortue", selon HDW 315
- Le destin de ce couple de Jean-Luc Delaire tient les exigences de son client-médette 286
- Vous êtes très bio, ces animaux vous parlent 274
- Le célèbre designer automobile Sergio Pininfarina est mort 156
- Séver Alajuria, Astérix avait été emprisonné au goulag 138

Vous la confirmerez tant attendue... une nouvelle particule a été découverte au Centre européen de recherche nucléaire (CERN), près de Genève.

- Boson de Higgs : la fin de la traque

Le boson de Higgs : les relations d'une quille

Sci-News.com

ATLAS Week - 3 Oct 2012

Home Astronomy Space Exploration Archaeology Paleontology Biology Physics Medicin

Syrian Stonehenge Elemental Fluorine Higgs Maya Neolithic Bow Ethiopian Genome Paimyra New Language

Published: Jul 4th, 2012

Physics | By John Shanks

New Particle Consistent with Higgs Boson Discovered at CERN

EL PAÍS

INTERNACIONAL POLÍTICA ECONOMÍA CULTURA SOCIEDAD DEPORTES

ESTÁ PASANDO Bosón Higgs Amnistía fiscal Código Civil no Incendio Valencia Caso Barclays Caso Bettencourt Volcán Yel: MÁS TEMAS...

DIRECTO

Los científicos del CERN anuncian el descubrimiento de una partícula que podría ser Higgs. Siguen la evidencia en la que están explicando un suceso que, de confirmarse, supondría un paso esencial de la física para explicar el origen de la materia.

Hallada "la más sólida evidencia" de la existencia del bosón de Higgs

El posible descubrimiento de la partícula es un paso esencial hacia la explicación del origen de la materia

"Puedo confirmar que se ha descubierto una partícula que es consistente con la teoría del bosón de Higgs, dicen los científicos. El descubrimiento de la partícula ayuda a explicar el origen de la masa. Los físicos del CERN explican en estos momentos sus hallazgos

- Discrepancia para entender en qué consiste el hallazgo
- La "voz" del bosón de Higgs, por A. BUZZI ZINNO
- VÍDEO Una explicación del bosón de Higgs
- Sigue en directo la conferencia del CERN
- FOTOGALERÍA Imágenes halladas de la "partícula de Dios"
- ¿Yacía la partícula de Dios?, por JAVIER SANPEDRO

OPINIÓN

Espejismo laboral

La caída del paro registrado en junio no cambia la tendencia de destrucción de empleo

SIQUENS EN

EL PAÍS

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100

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scientists discover subatomic particle

Scientists gather for a major announcement in Cern, home of the Large Hadron Collider



What happens inside the Large Hadron Collider. Scientists at Cern, near Geneva, have this morning announced the likely discovery of the Higgs boson particle. Photograph: Cern

7.17am: Good morning all.

Posted by Lizzy Davies
 Wednesday 4 July 2012
 14:43 BST
 guardian.co.uk
 Jump to comments (390)

Article history

Science
 Higgs boson - Particle physics - Physics - Cern

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La importancia del "partícula de Dios"

Accedi | Milano 16°

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Why did we succeed?

Recipe

1. Make a fundamental discovery*
2. Communicate it to the world*

* Requires some vision & preparation.

Vision & Preparation



EPPCN

European Strategy 2006

“Council will establish a network of closely cooperating professional communication officers from each Member State, which would incorporate existing activities, propose, implement and monitor a European particle physics communication and education strategy, and report on a regular basis to Council.”

Establish Communication Channels

















ETH Zürich











 The Research Council of Norway




IPPOG

ALICE COLLABORATION	ATLAS COLLABORATION	AUSTRIA	BELGIUM
			
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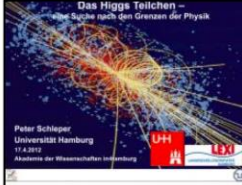

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<small>Daniel Lelouch</small>	<small>Celia Pasca</small>	<small>Fardous Saada</small>	<small>Krzysztof Wozniak</small>
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Learning Topics



- ▶ Physics
- ▶ Technology
- ▶ International Collaboration
- ▶ Broader Impacts

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Learning Topic
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Audience
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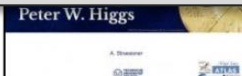

Language
- Any -

Key Words

GO

Resources in your language

Develop Outreach Material

Presentation

Higgs-Presentations

A collection of presentations on the Higgs-Boson in German

Filter by audience

- 6 to 9 years
- 9 to 12 years
- 12 to 15 years
- 15 to 18 years
- 18 to 25 years
- 25 years+
- Science Educator / Science Explainer

Student & Teacher Programmes

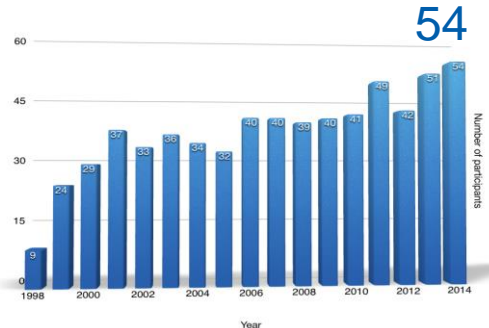


2014

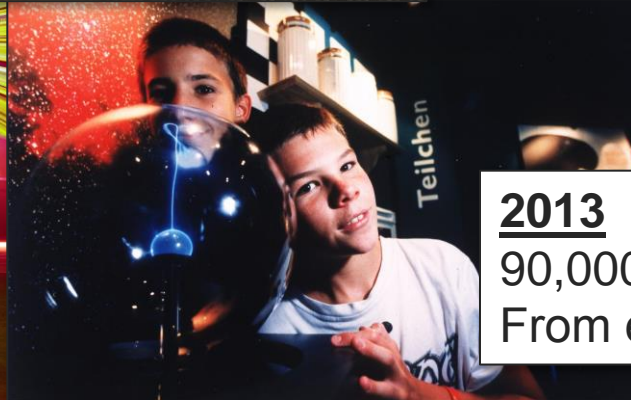
291 summer students from 75 countries
54 high school teachers from 32 countries
41 national program high school teachers



Number of participants in CERN's High School Teacher Programme
1998 - 2014

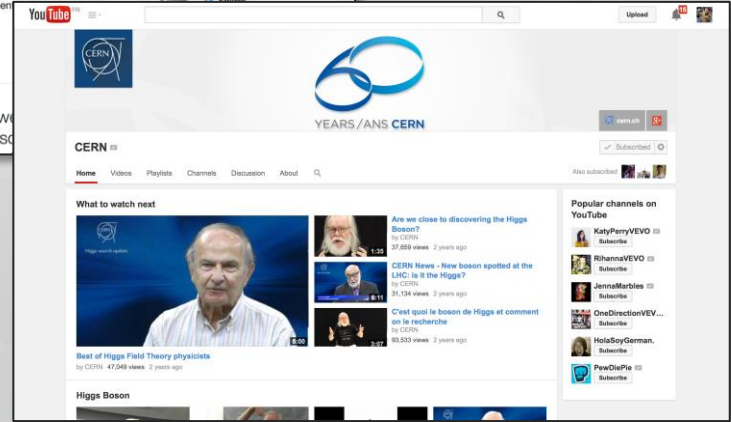
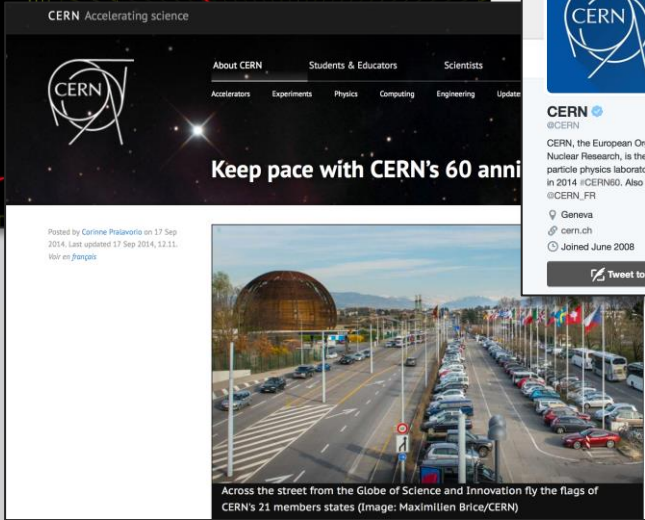
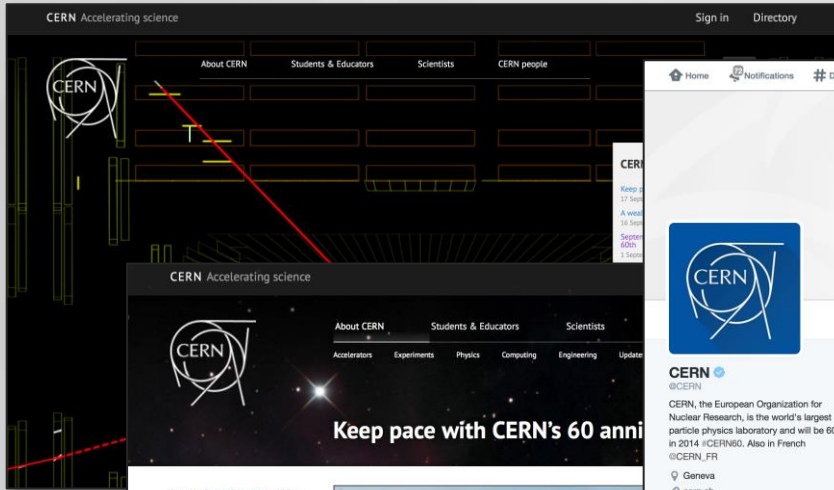


CERN Visits Circuit



2013
90,000 visitors
From everywhere...

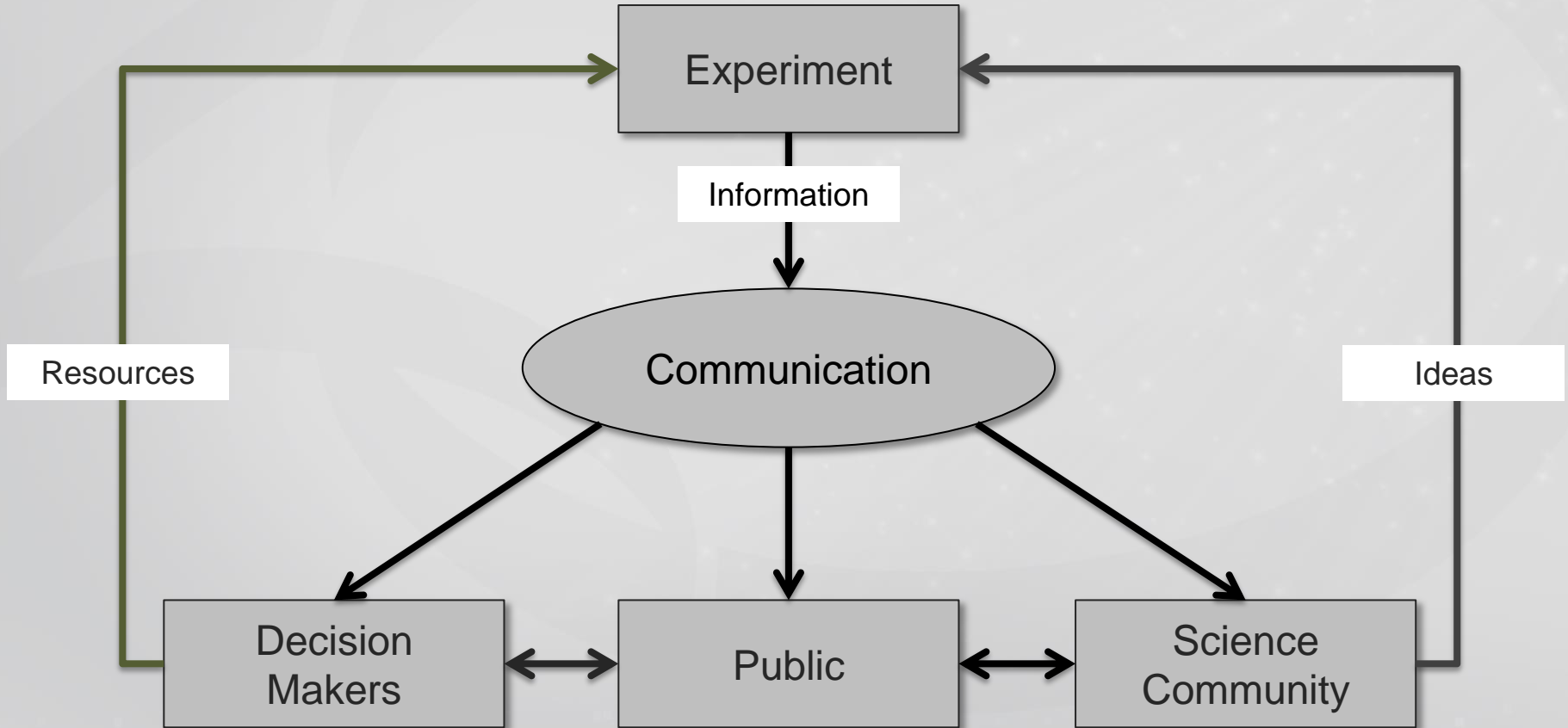
CERN Communication



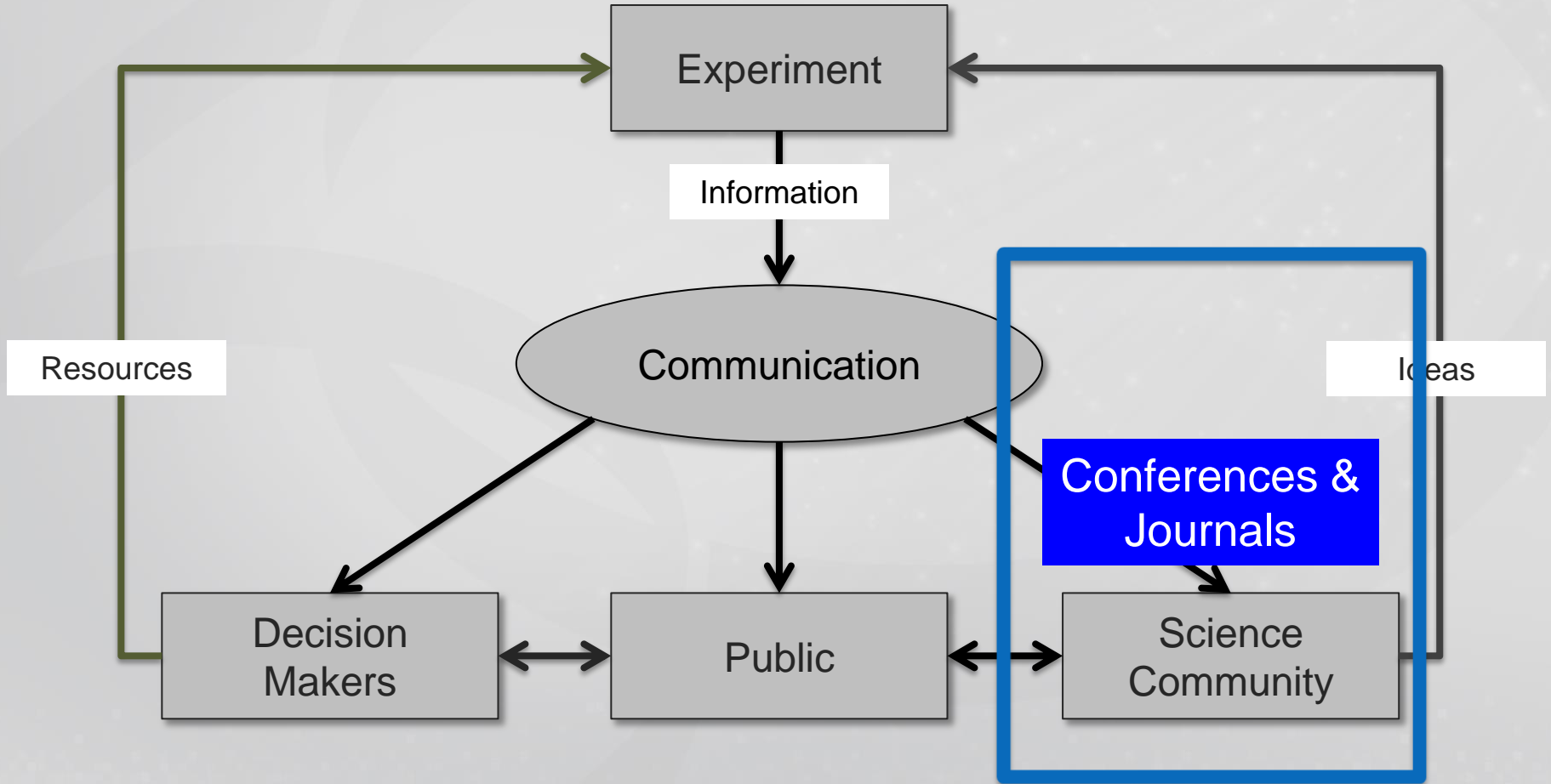


Why is this important?

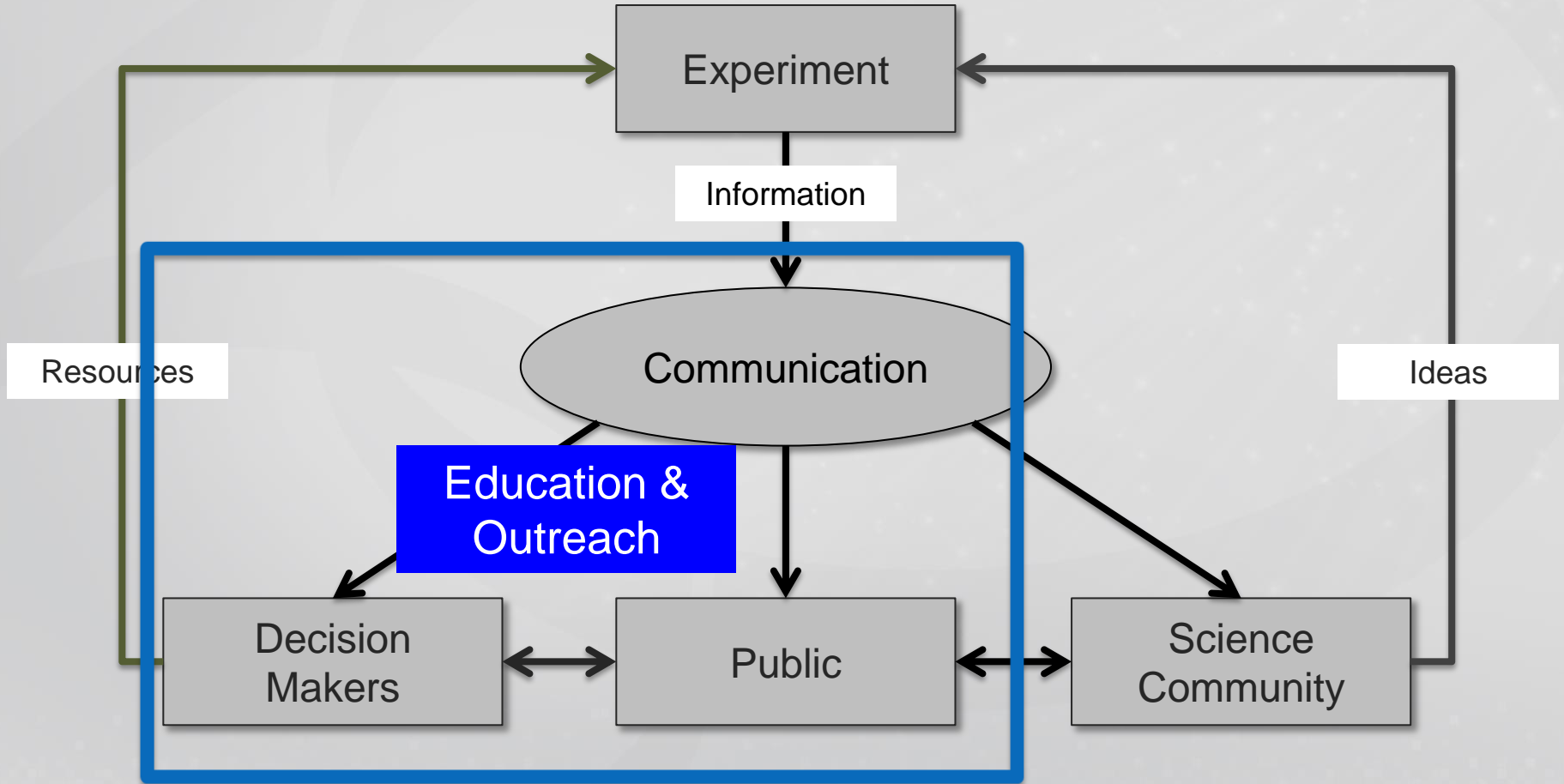
Communication is both **central** and **essential** to the scientific process.



Communication is both **central** and **essential** to the scientific process.



Communication is both **central** and **essential** to the scientific process.





Council's Globalisation Strategy

“... open Membership of CERN to all States irrespective of their geographical location ...”

Virtual Visits

Poland

Palestine

Nepal

USA

Mozambique

Chile

ATLAS Numbers:

Since 2011

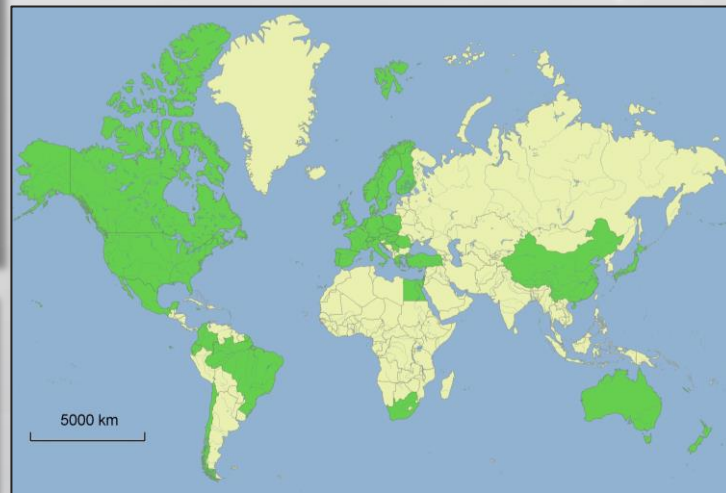
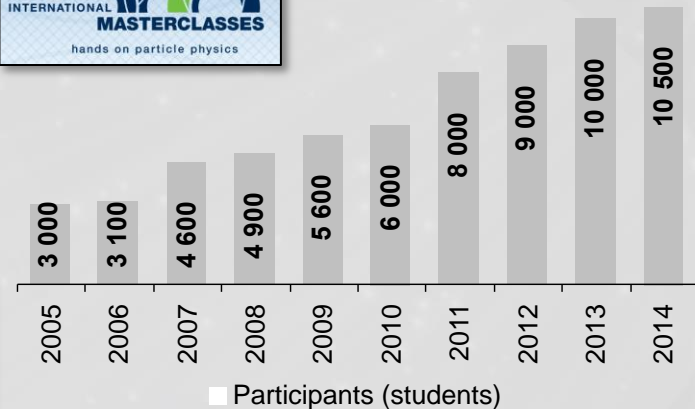
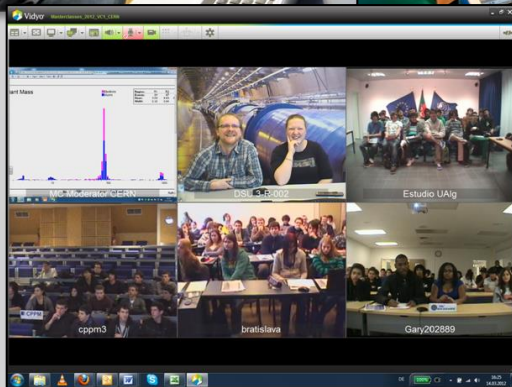
200 visits

10,000 visitors

7 continents

ANTARCTICA

International Masterclasses



2014
239 Masterclasses
183 Institutes
48 Videoconferences

What's Next?

*“When the difficulty
Of the mountains is once behind
That's when you'll see
The difficulty of the plains will start...”*
-Bertholt Brecht

