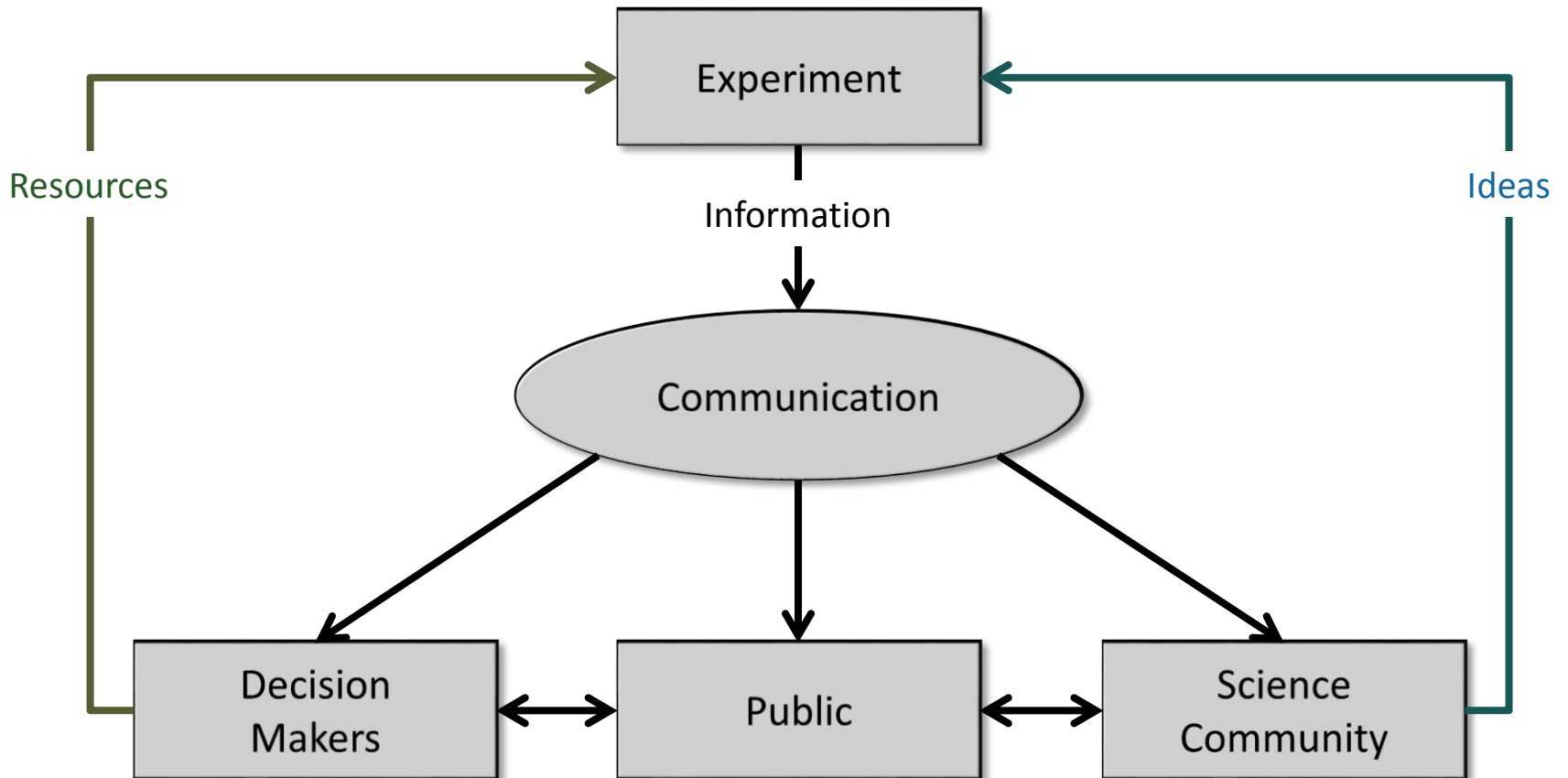


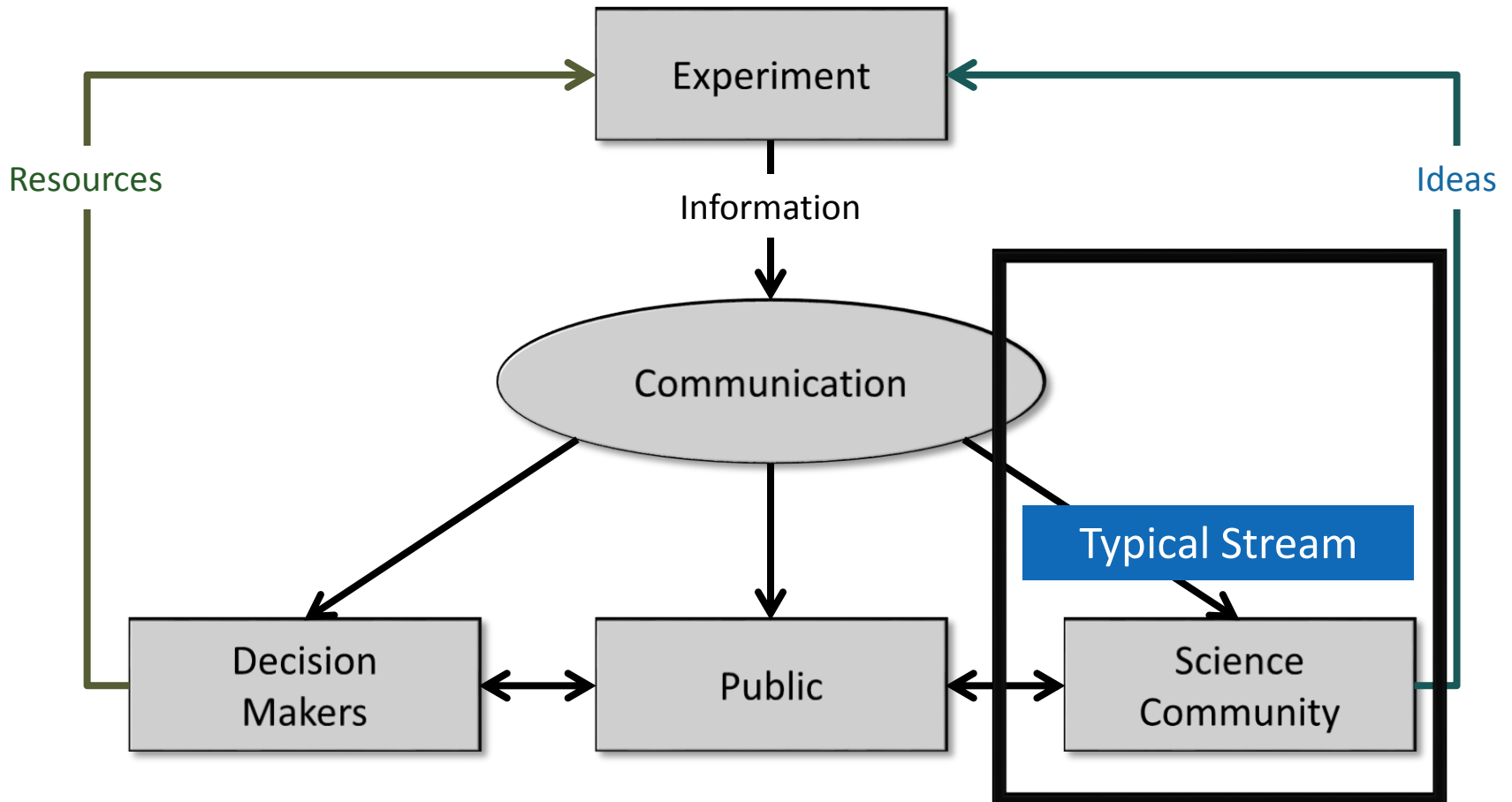
Virtual Visits

Bringing the World to CERN

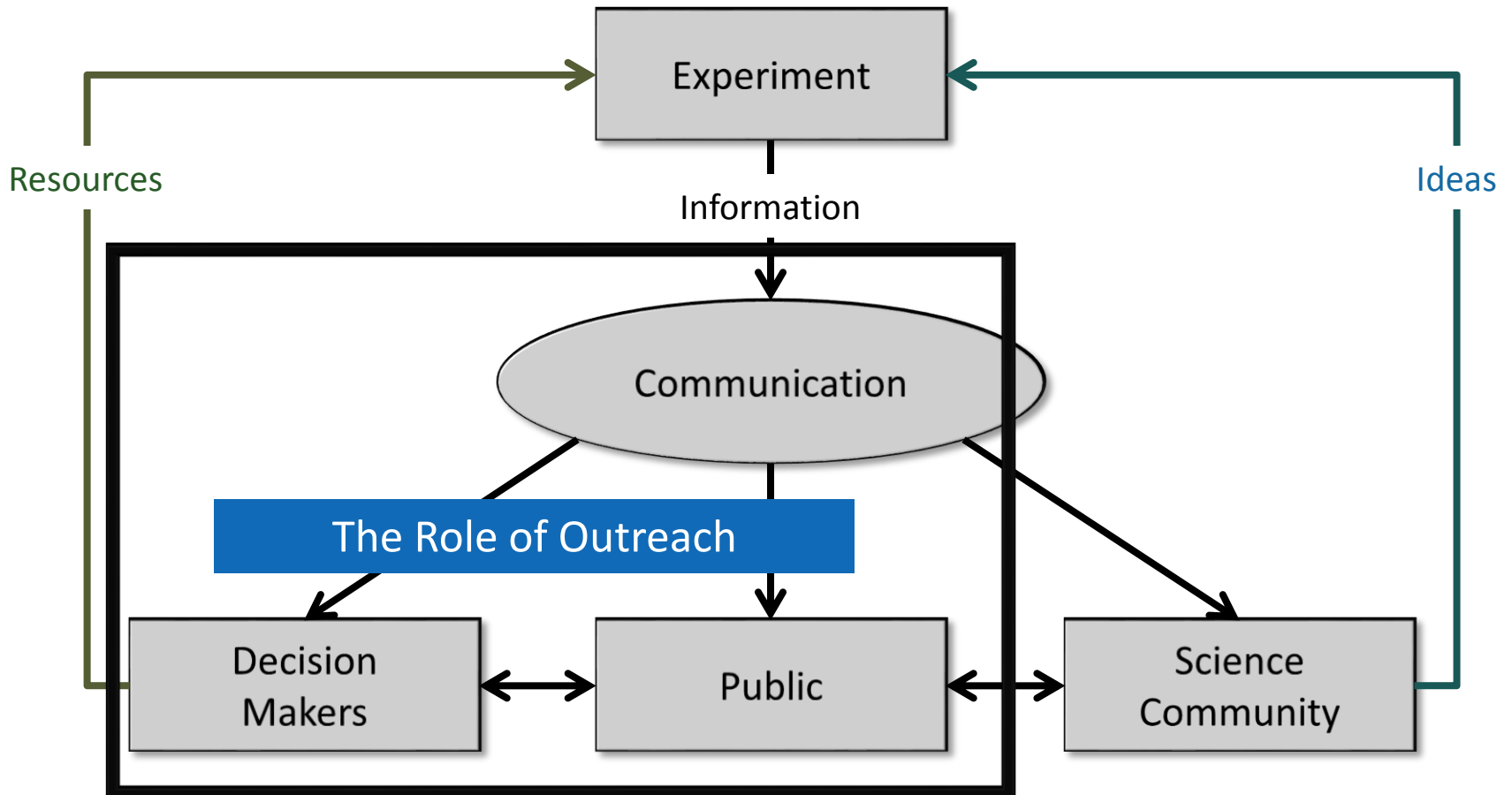
Communication in Science



Communication in Science



Communication in HEP



Target Audiences

With whom do we want to communicate?



General Public



Decision Makers

Teachers & Students



Goal: Deliver these Messages

1. Understanding, appreciation of ATLAS and the field of particle physics; benefits of fundamental research for society.
2. Impact of our research on society now and as an investment for the future, in order to sustain support for ATLAS and the field of particle physics.
3. **Excitement of scientific discovery, appreciation of scientific method to help instil and reinforce these values in society, and to attract and retain the next generation of scientists and educators.**



A Few Unwritten* Goals

- ▣ Fulfil our social obligation
 - ▣ Directly through dialogue

- ▣ Engage *remote* audiences
 - ▣ Geographically, Socially, Economically

- ▣ Train the members of our collaboration to communicate
 - ▣ For their sake and ours

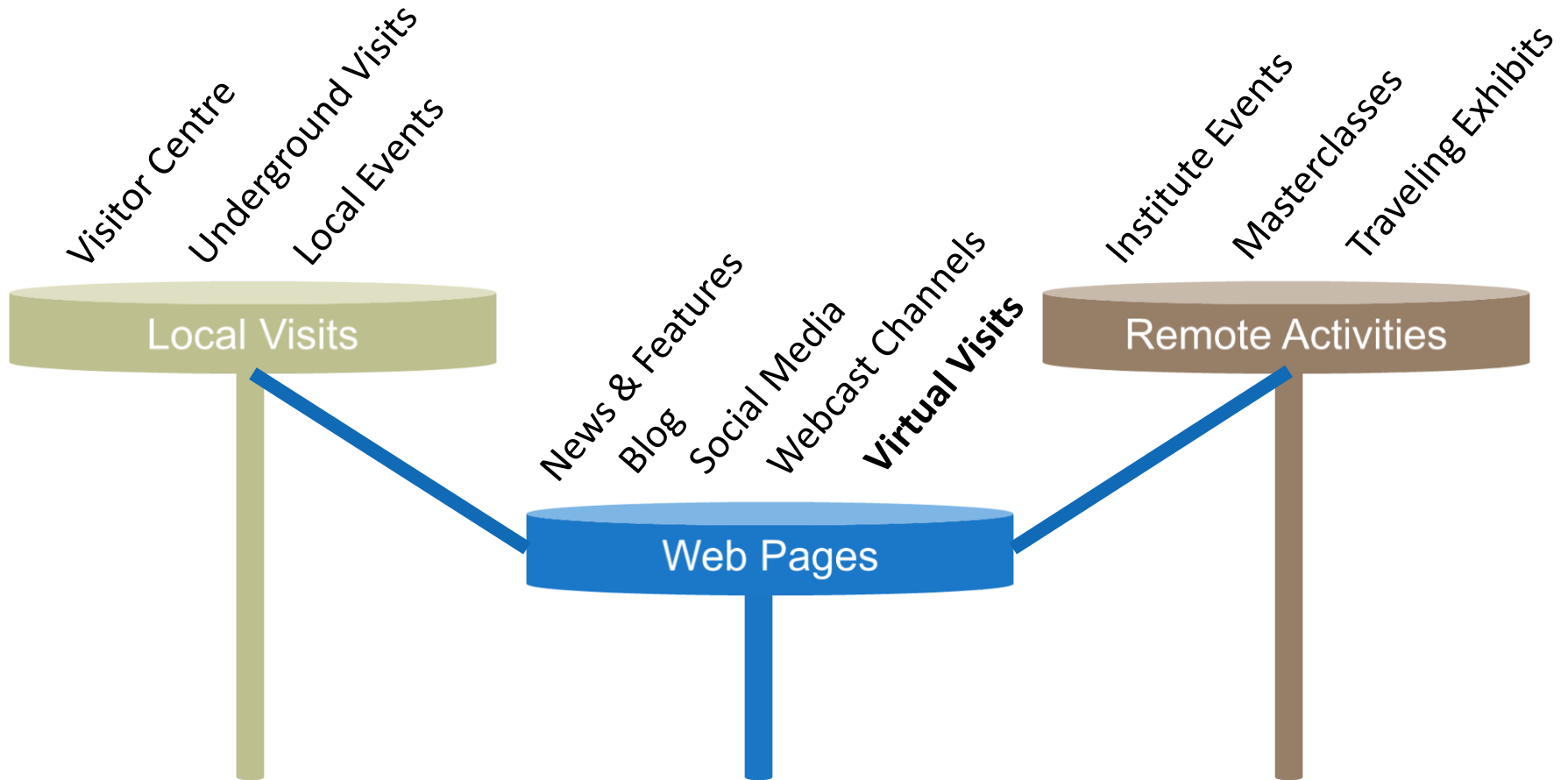


(*) but equally important

Platforms

...and their content

Outreach Platforms





[Home](#)
[Info](#)
[Multimedia](#)
[Blogs](#)
[Links](#)
[Visit ATLAS](#)
[Contact](#)
[Collaboration Site](#)
[Store](#)
[Press](#)
[Student/Teachers](#)



News National Geographic: Discovering the Higgs through Physics, Dance and Photography_ Like 2k

ATLAS Briefings



Run I Search for New Massive Bosons Builds Excitement for Run II

ATLAS News



Musical Dimensions

CERN will be back at the Montreux Jazz Festival for its third annual workshop: 'The Physics of Music and The Music of Physics' on 9 July at 15:00 in Petit Palais. Live events from the ATLAS experiment mapped into music will feature as part of the event. [More...](#)

ATLAS RUN 2 STATUS

TOTAL LUMINOSITIES

95.8 pb⁻¹	PROTON - PROTON
0 nb⁻¹	PROTON - LEAD
0 pb⁻¹	LEAD - LEAD

LIVE EVENTS



LATEST LHC RUNS

STATUS LOGBOOK

ATLAS Science & Art

ATLAS and Run 2

ATLAS is now taking data at 13 TeV. For Press and Public, [resources](#).

Discovery
Quest

ATLAS
eTours

Art In
ATLAS

About ATLAS

Mapping the Secrets of the Universe

ATLAS is a particle physics experiment at the Large Hadron Collider at CERN that is searching for new discoveries in the collisions of protons of extremely high energy. ATLAS will search for particles that have shed light on the beginning of the universe and determine its structure. The unknowns are extra dimensions, the unification of fundamental forces, and evidence for dark matter candidates in the Universe. Following the discovery of the Higgs boson, further data will allow in-depth investigation of the boson's properties and thereby of the origin of mass.

- What is the schedule of ATLAS?
- Who are the 3000 physicists in ATLAS?
- What is the LHC?
- How big is ATLAS?
- How much data will be recorded?
- Why is there so much excitement?
- Are students involved?

Multimedia Material

"Fast Forward to Physics" - As ATLAS gears up to record data from proton collisions delivered by the Large Hadron Collider (LHC) at an unprecedented energy level, here are glimpses from the last two years of preparations. [More...](#)



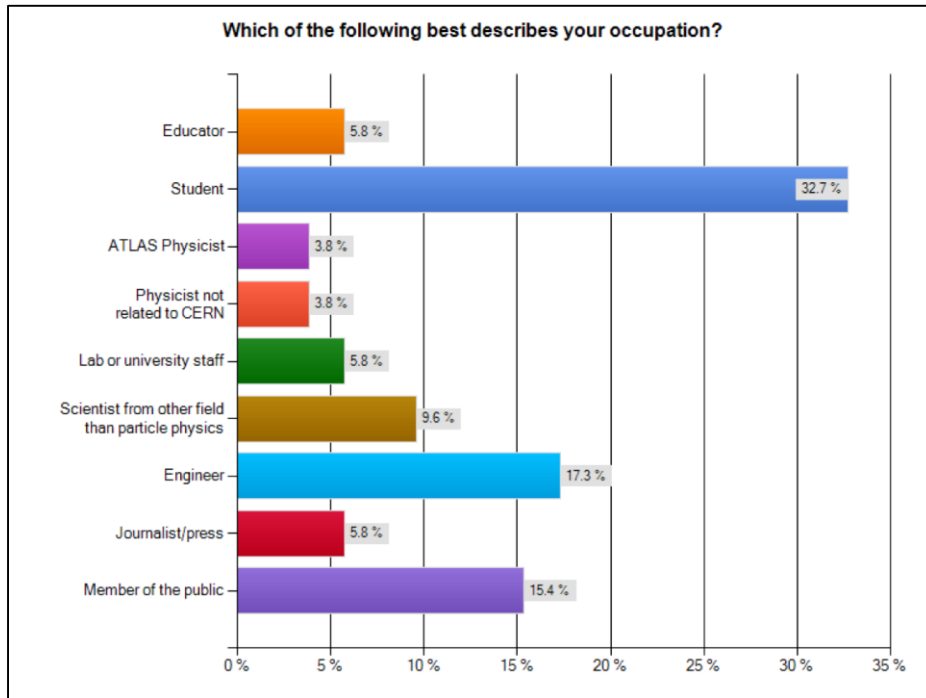
The ATLAS Experiment © 2015 CERN

Current ATLAS Public Web Pages

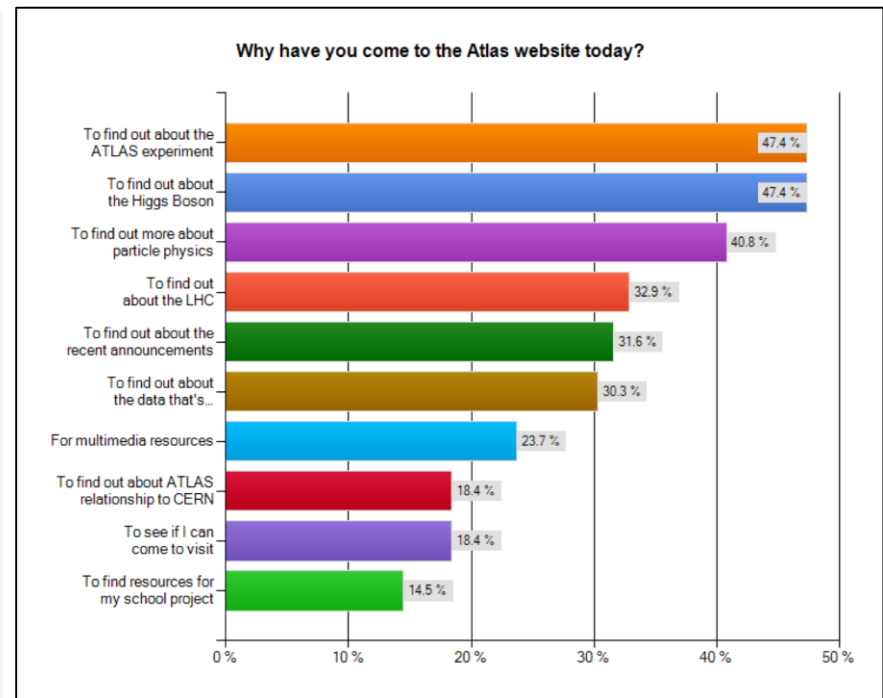
ATLAS Public Web Page – Readers

Reader Survey Results

Who are you?



Why are you here?



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ATLAS Discover Experiment, Physics, Collaboration, Detector Resources Multimedia, Explore, Learn, Visit Updates News, Photo Essays, Briefings, Blog, Statements

ATLAS is... an experiment at CERN designed to explore the secrets of the universe [Learn More](#)

Discover ATLAS **Resources** **Updates**

What is ATLAS? **This Month's Featured Image** **Impressions from the Control Room**

ATLAS is one of the four major experiments on the [Large Hadron Collider](#) at [CERN](#).

Discover more about ATLAS:

- The Experiment
- The Physics
- The Collaboration
- The Detector

As final preparations were made for the start of the Large Hadron Collider's (LHC) Run 2, the ATLAS Control Room was the centre of activity. Here are images from the three days that were landmark events...

Photo Essay

- Splashes for Synchronization
- Shots from the Long Shutdown

Coming this Fall

Discover Experiment Physics Collaboration View Live Webcam View Live Collisions

Resources Multimedia Activities & Games Educational Programmes Visit ATLAS

Updates ATLAS News Photo Essays Physics Briefings ATLAS Blog Press Statements Photo Essays

More ATLAS LEGO Model ATLAS Book LHC Pop-Up Book CafePress Online Shop Higgs Hunters

Contact Contact ATLAS Visit Atlas Book a Virtual Visit Press Statements ATLAS Press Kit

Follow ATLAS on [Twitter](#), [Facebook](#), [Google+](#) or watch hundreds of ATLAS videos on [YouTube](#).

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The [experiment](#), [collaboration](#), [detector](#) and the [Higgs Boson](#). Watch the [ATLAS webcams](#) and more...

The Experiment [View](#) [Edit](#)

ATLAS is one of the four major experiments at the [Large Hadron Collider](#) at [CERN](#). It is a general-purpose particle physics experiment run by an international collaboration and, together with [CMS](#), is designed to exploit the full discovery potential and the huge range of physics opportunities that the LHC provides.

ATLAS' scientific exploration uses precision measurement to push the frontiers of knowledge by seeking answers to fundamental questions such as: What are the basic building blocks of matter? What are the fundamental forces of nature? Could there be a greater underlying symmetry to our universe?

ATLAS physicists test the predictions of the [Standard Model](#), which encapsulates our current understanding of what the building blocks of matter are and how they interact. These studies can lead to groundbreaking discoveries, such as that of the Higgs boson, physics beyond the [Standard Model](#) and the development of new theories to better describe our universe.

The years ahead will be exciting as ATLAS takes experimental physics into unexplored territories – maybe with new processes and particles that could change our understanding of energy and matter.

The ATLAS experiment [View](#)

From a cavern 100 metres below a small Swiss village, the 7000-tonne ATLAS detector is probing for fundamental particles in collisions from the Large Hadron Collider.

Timeline: 1992 — 2015

Discover ATLAS **Resources** **Updates**

What is ATLAS? **This Month's Featured Image** **Impressions from the Control Room**

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- The Physics
- The Collaboration
- The Detector

Find and download material:

- Images, Video, Animations
- Activities & Games
- Educational Programmes
- Visiting ATLAS

As final preparations were made for the start of the Large Hadron Collider's (LHC) Run 2, the ATLAS Control Room was the centre of activity. Here are images from the three days that were landmark events...

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ATLAS

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News, Photo Essays, Briefings, Blog, Statements

Discover The [experiment](#), [collaboration](#), [detector](#) and the [Higgs Boson](#). Watch the [ATLAS webcams](#) and more....

The Physics

View Edit Translate

ATLAS explores a range of physics topics, with the primary focus of improving our understanding of the fundamental constituents of matter. Some of the key questions that ATLAS addresses are:

What are the basic building blocks of matter?

The [Standard Model](#) describes the elementary subatomic particles of the universe which have been experimentally seen. ATLAS studies these particles and searches for others to determine if the particles we know are indeed elementary or if they are in fact composed of other more fundamental ones.

What are the forces that govern their interactions?

The [Standard Model](#) also describes the fundamental forces of Nature and how they act between fundamental particles. Possible discoveries at the LHC could validate models, such as those incorporating Supersymmetry, where the forces unify at very high energies.



What happened to antimatter?

By searching for imbalances in the production of matter and [antimatter](#), we seek to understand why our universe appears to comprise only matter.

What is "dark matter"?

Astronomical measurements support the existence of matter that cannot be directly seen. The hermetic construction of ATLAS, however, makes it possible to search for this ["dark matter"](#).

What was the early universe like and how will it evolve?

Proton-proton and heavy-ion collisions delivered by the LHC recreate the conditions immediately following the Big Bang when the Universe was governed by high-energy particle physics and later by a primordial soup of quarks and gluons, and allow ATLAS to study fundamental questions such as the Brout-Englert-Higgs field or Dark Matter.

How does gravity fit in?

Gravity is extremely weak when compared to the other forces. To explain the difference we look for exotic phenomena as [extra dimensions](#), [gravitons](#), and [microscopic black holes](#).



Anything else?

Perhaps the most exciting aspect of the ATLAS physics programme is our ability to explore and discover new phenomena beyond existing theoretical predictions: the search for the unknown.

The Higgs boson

A landmark discovery that will help us understand the basic features of the universe

How do fundamental particles acquire mass? Why do they have different masses?

Physicists describe particle interactions using the mathematics of field theory, in which forces are carried by intermediate particles called bosons. Photons, for example, are bosons carrying the electromagnetic force. In 1964, the only mathematically consistent theory required bosons to be massless. Yet,

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Resources Watch our [multimedia material](#), explore our [activities & games](#), or learn about our [student & teacher programmes](#).

Resources

View Edit

WATCH

The [Multimedia Resource Page](#) provides access to a large collection of [images](#) and [video](#) of the ATLAS Experiment.

Multimedia Resources

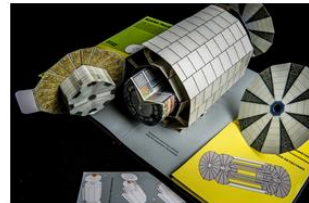
- Physics Events & Plots
- Outreach & Education
- Collaboration
- Milestones & Achievements
- Site & Detector
- Best of ATLAS
- IPOG Database
- ATLAS on CDS

Explore ATLAS

- CERNland
- The LHC Game
- Hypatia
- Hypatia Online
- Minerva
- Camelia

EXPLORE

The [Explore ATLAS Page](#) provides access to [activities](#), [books](#), [games](#), and [other material](#) related to ATLAS, the LHC, CERN and particle physics.




Educational Programmes

- CERN Summer Student Programme
- CERN OpenLab Summer Student Programme
- CERN Academic Training Lectures


LEARN

The [Student and Teacher Page](#) provides access to the various educational programmes offered at CERN.




Discover ATLAS

What is ATLAS?



Resources


This Month's Featured Image



Updates

Impressions from the Control Room

Published June 17, 2015



Social Media

Facebook Page

Facebook Group

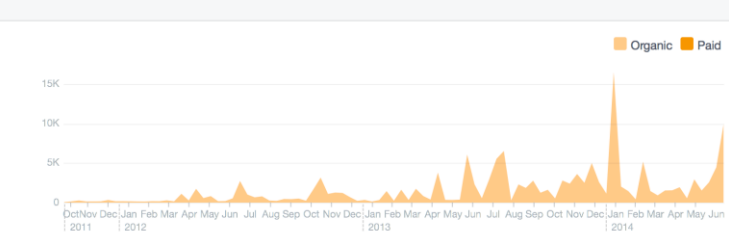
Google Plus

Twitter

ATLAS Experiment Twitter Followers

Total Reach

The number of people who were served any activity from your Page including posts, posts by other people, Page like ads, mentions and checks in.



BENCHMARK
Compare your average performance over time

Organic
Paid

Facebook Reach 20k
Twitter Followers 30k
Google+ Followers 125k

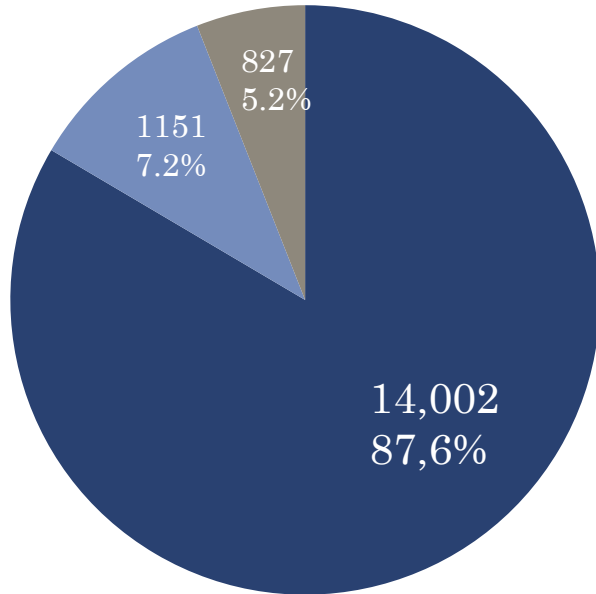
ATLAS Visitor Centre



- Active Part of CERN Visit Circuit
 - Presented by ATLAS / CERN Guides
 - Interactive Displays, Games, 3D Movie
 - Inaugurated in 2008
 - 50k Visitors in 2014 (far greater than expectations)
 - Complete re-vamping in the works...

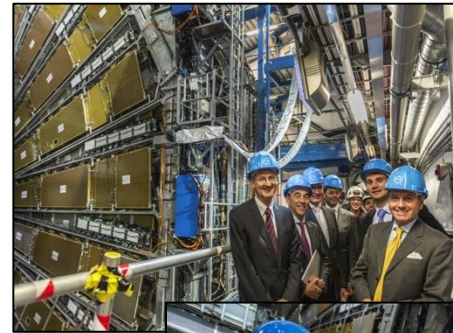
ATLAS Underground Visits

Visitors 2013
Total: 15,980



+ 2500 during Open Days

- Public
- VIP
- Media



Rolex Director General
G. Marini



German President
Joachim Gauck



Pop Star, STEM Supporter
Will.i.am

ATLAS Virtual Visits





ATLAS Virtual Visits

Welcome Share on 

The ATLAS Experiment at CERN is one of the largest most complex scientific instruments ever constructed. It is designed to explore the inner universe, advancing our understanding of the basic building blocks of nature.

Three thousand physicists from 175 institutions in 38 countries around the world participate in ATLAS. When the LHC is in operation, up to 600 million protons collide every second inside the detector. ATLAS Virtual Visits gives the public a unique opportunity to be part of this great scientific adventure.

Using web-based video conferencing tools, participants talk with an ATLAS physicist, receive a tour of the control room, and get answers to their questions.

Next Event:

 New York
 Fri, 18 May





Future Events
A list of upcoming Virtual Visits.



Past Events
A selection of ATLAS Virtual Visits from all over the world



Technical Requirements
All you need to know to organise your own ATLAS Virtual Visit



ATLAS Experiment
Discover one of the world's greatest scientific adventures



ATLAS Live
The web cast of ATLAS Experiment



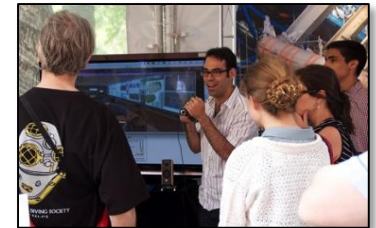
Visit CERN
Come and see inside the world's largest particle physics laboratory

Since 1 Jan 2013

108 Visits

74 Guides

7 Continents



<http://cern.ch/atlas-virtual-visits>

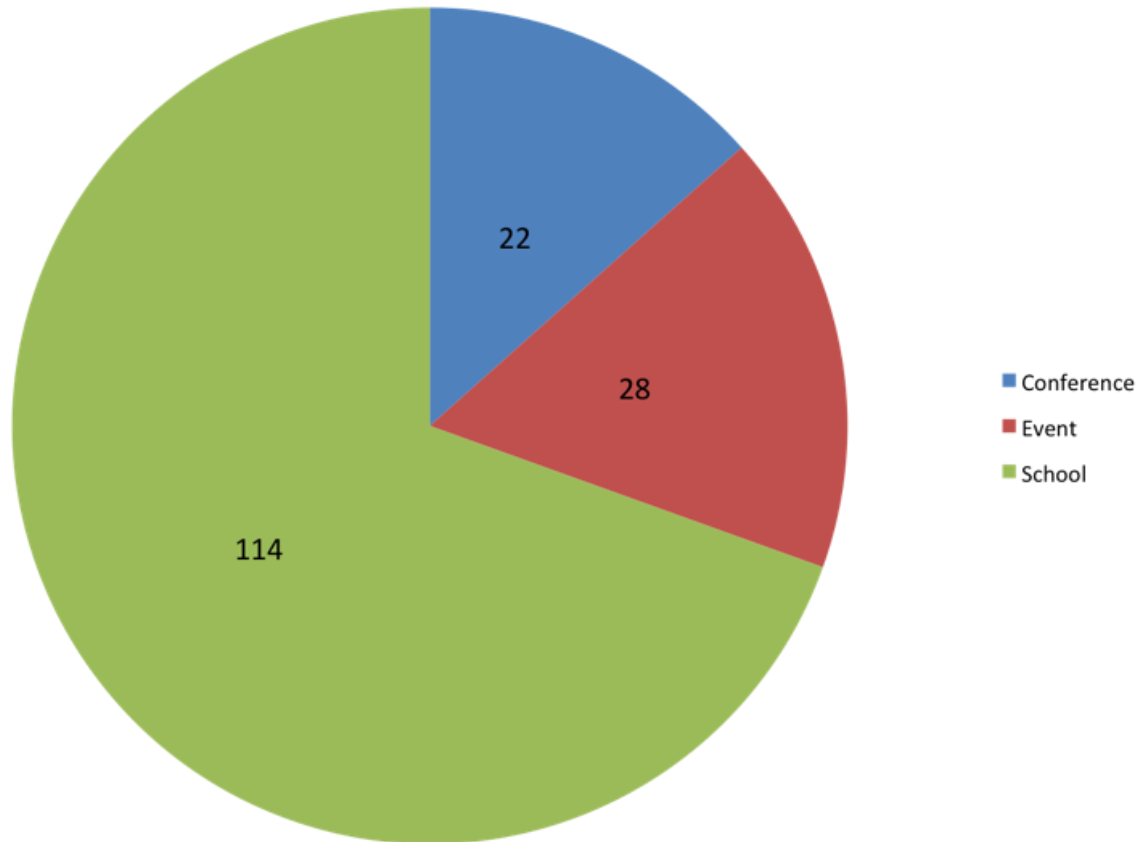
ATLAS Virtual Visits



ATLAS Virtual Visits



Distribution of Virtual Visits per type

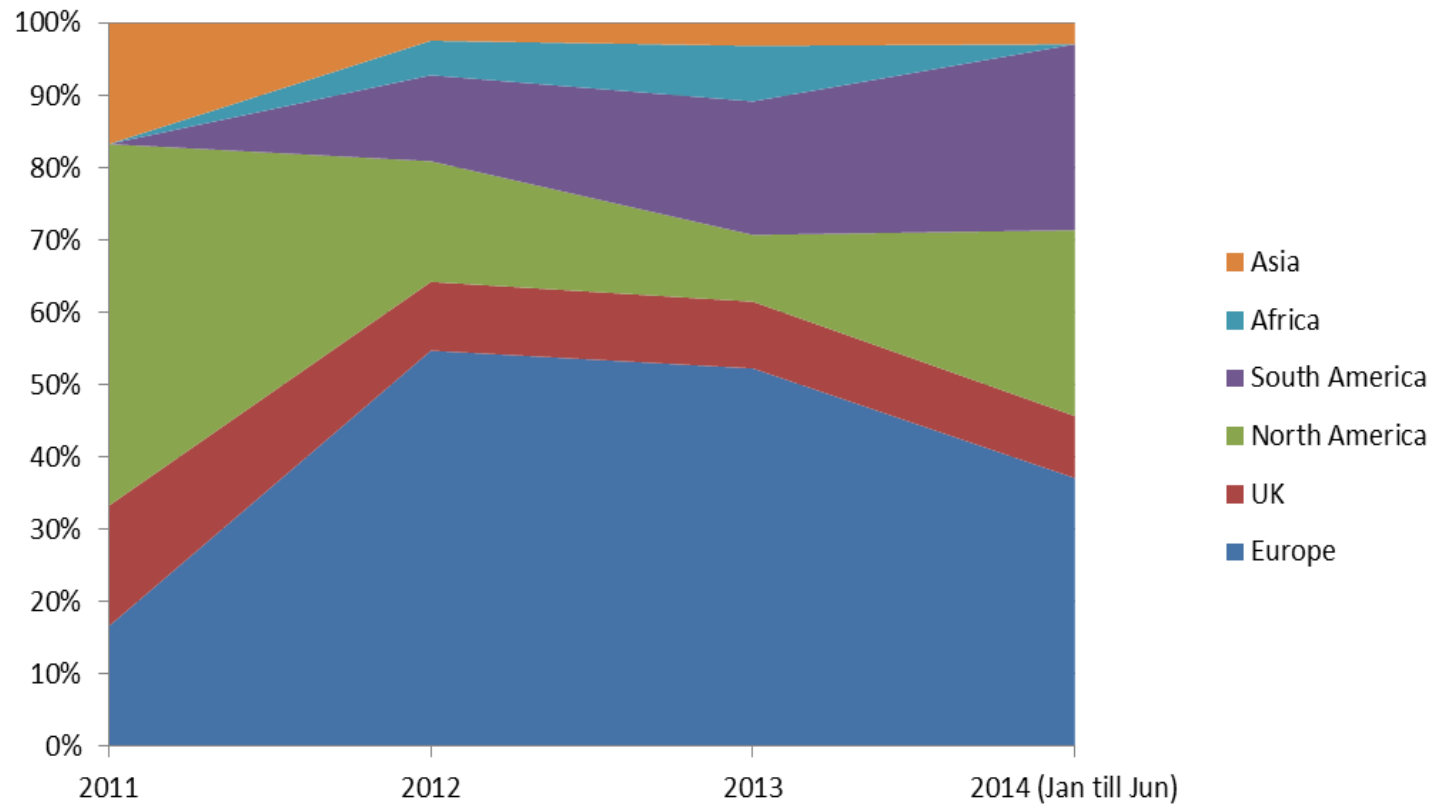


<http://cern.ch/atlas-virtual-visits>

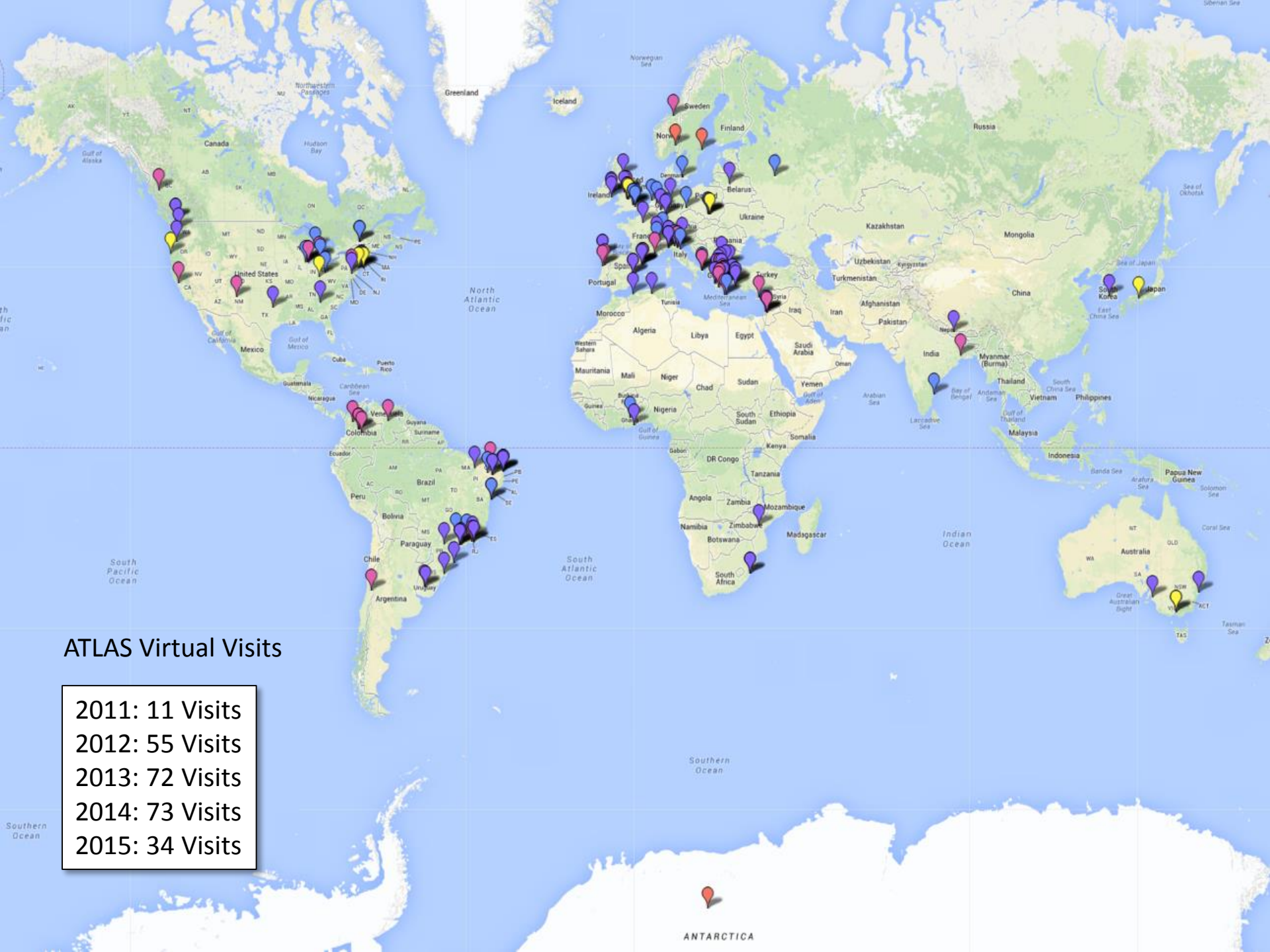
ATLAS Virtual Visits



Percentage of Annual Visits from Various Regions



2015		
13 January	High School of Ponte de Sor, Portugal	ATLAS Masterclass
21 January	III Liceum Ogólnokształcące, Poland	ATLAS Masterclass
26 January	Laboratoire de l'Accélérateur Linéaire in Orsay, France	ATLAS Masterclass
29 January	15 High Schools from the Argos Prefecture, Greece	ATLAS Masterclass
4 February	Institut Montserrat Miró, Spain	ATLAS Masterclass
12 February	Three High Schools in Athens, Greece	GO-LAB Program
18 February	Zewail City of Science and Technology, Egypt	ATLAS Masterclass
27 February	American Academy of Lamaca, Cyprus	ATLAS Masterclass
28 February	Pontificia Universidad Católica in Santiago, Chile	ATLAS Masterclass
6 March	Central California STEM Collaborative, Fresno, US	ATLAS Masterclass
12 March	The Oklahoma State University, Stillwater, US	ATLAS Masterclass
13 March	McGill University, Montreal, Canada	ATLAS Masterclass
19 March	Grammar School Christoph Graupner Kirchberg, Germany	Natural Sciences' Day
23 March	Federal University of Rio Grande do Norte	ATLAS Masterclass
27 March	Colombia and Bogota by Barranquilla	ATLAS International Masterclass
27 March	University of Roma Tre, Italy	ATLAS Masterclass
28 March	Haverford College, US	ATLAS Masterclass
2 April	Internationella Engelska Skolan, Halmstad, Sweden	ATLAS Masterclass
7 April	Wayzata High School in Plymouth, MN, US	ATLAS Masterclass
15 April	University of Birmingham, UK	Particle Physics Masterclass
18 April	SFU, TRIUMF, and University of Victoria, Canada	Particle Physics Masterclass
20 April	University of Salento, Italy	The Scientific Culture Week
23 April	The High school of Pyli, Greece	ATLAS Masterclass
24 April	Faculty of Sciences at the Lebanese University in Beirut	Physics Without Frontiers, Physics Masterclass
27 April	An-Najah National University, Palestine	ATLAS Masterclass
28 April	Schools Fontes Pereira de Melo in Porto, Portugal	ATLAS Masterclass
28 April	Federal University of Pernambuco, Brazil	ATLAS Masterclass
18 June	MINNESAUKE Elementary School in Long Island, US	ATLAS Masterclass
24 June	CPPM in Marseille, France	physics summer camp



ATLAS Virtual Visits

2011: 11 Visits
2012: 55 Visits
2013: 72 Visits
2014: 73 Visits
2015: 34 Visits

ANTARCTICA

ATLAS Virtual Visits



Next Steps (and some dreams)

- ▣ Re-vamping of ATLAS Infrastructure (HD Quality) [**DONE**]
- ▣ Joint visits with CMS, other LHC experiments [**DOING**]
- ▣ CERN-wide service? [**Still Hope**]
- ▣ Educational platform for post-visit activities?
 - ▣ Content management site
 - ▣ Material collected by class
 - ▣ Links to resources found by class
 - ▣ Chat with physicists, other classrooms
 - ▣ Etc.

Links

ATLAS Public Platforms

Public Home Page	http://atlas.ch
ATLAS Blog	http://atlas.ch/blog
ATLAS Virtual Visits	http://cern.ch/atlas-virtual-visit
ATLAS Live	http://cern.ch/atlas-live
Twitter Feed	http://www.twitter.com/ATLASexperiment
Facebook Page	http://www.facebook.com/ATLASexperiment
Google+ Page	http://www.google.com/+ATLASexperiment
YouTube	http://www.youtube.com/user/TheATLASExperiment

Common Projects

IPPOG Database	http://ippog.web.cern.ch
Hangout with CERN	http://cern.ch/hangouts