ATLAS EDUCATION AND OUTREACH

Coordinators: Michael Barnett and Steven Goldfarb
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CONTENT

- New communication plan 2011 - 2013
- News and social media
- AVC
  - new presentation
  - AVION
  - CAMELIA
  - new 3D movie
- Virtual visits
- French version of the Pop-up book
- Art of ATLAS in Stockholm
- Support for events organized by CERN
IMPORTANT NOTE

- This is a summary of the activities developed by the small team based at CERN.
- There are many other activities going on throughout the collaboration including master classes events.
- Collecting and sharing information about these efforts as well as providing them the necessary support will be one of our main challenges for this year!
COMMUNICATION PLAN
2011 - 2013

Goals and Targets

- **Goal**: Public appreciation of the scientific goals and achievements of ATLAS and the field of particle physics
  - **Target Audience**: members of the media and general public
- **Goal**: Sustained support for ATLAS, the LHC and particle physics research
  - **Target Audience**: decision makers and members of industry
- **Goal**: Attract and retain the next generation of scientists and science educators
  - **Target Audience**: teachers and students age 13-18
NEWS AND SOCIAL MEDIA

What Has Changed?

- From construction and preparation to measurement, and (soon) discovery
- LHC Visibility
  - Increased coverage in media such as conferences
- Nature of Media
  - Social media now is a major component of news stream
WHAT STILL NEED TO BE ADDRESSSED

Better define the message

- It will help to explain the scientific process in order for people to better understand the “Event” we are talking about. Story telling is indeed a great format.

- However I personally think we can go beyond it: **We can inspire people on why are we doing this to begin with?**
NEWS AND SOCIAL MEDIA

We are working on collaboration with CERN and LHC experiments for the “discovery package”

Content that we are producing ourselves

- Conferences
  - Teaser text, talk summaries, plots, event displays

- Papers (coming soon)
  - Plain English summaries, plots, event displays, video, interviews, ...

- Blogs
  - Personal articles about taking shift, doing an analysis, preparing for a conference,...

- General News Items
  - Milestones, events, media items about ATLAS, LHC
NEWS PLATFORMS
NEWS PLATFORMS

- Public Web Page- News Up Front and timely Updates
  - [http://atlas.ch](http://atlas.ch)

- ATLAS Blog – a direct personal link between ATLAS physicists and the public
  - [http://atlas.ch/blog](http://atlas.ch/blog)

- Twitter - Back in Use and close to 4.000 followers
  - [http://twitter.com/#!/ATLASexperiment](http://twitter.com/#!/ATLASexperiment)

- YouTube – Videos and Animations
  - [http://www.youtube.com/user/TheATLASExperiment](http://www.youtube.com/user/TheATLASExperiment)

- Facebook- Starting Up

- Google plus and Flickr- under Investigation
An example...

DIJET ANALYZES TO NJP

- An ATLAS paper on searches for new physics in dijet final states was accepted for publication by New Journal of Physics.
- The publication has the tradition to (optionally) accompany their publications with additional material targeted to the public. This material includes a short easily-accessible summary of the paper and of its importance, and a video where (some of) the authors describe the main results of the paper.
- We produced 2 videos; **one aiming the public of NJP and the other the general public**
The convener and team that published the ATLAS Dijet Paper at the New Journal of Physics, took on board the

http://iopscience.iop.org/1367-2630
DIJET ANALYZES FOR NJP

- [http://cdsweb.cern.ch/record/1353892](http://cdsweb.cern.ch/record/1353892)
DIJET ANALYZES FOR PUBLIC

Public version:
Steven Goldfarb as a host and Joao Pequenao’s animation

- [http://cdsweb.cern.ch/record/1359972](http://cdsweb.cern.ch/record/1359972)
The ATLAS Visitor Centre

The AVC will pass through a renovation in 3 phases:

Phase 01 – immediate action for improvement

Phase 02 - Development of the path between the Globe and ATLAS

Phase 03 - Renew the AVC in collaboration with Rolf Landua’s committee for the other sites on the CERN visits itinerary, including CCC, SM18 and CERN computing center

http://cern.ch/Atlas/Visits
AVC Phase I

Goal: Closer collaboration with CERN visitor service and Increased Focus on Physics
- 30k visitors in 2010, continuing to increase in 2011

Actions:
- Substitute the current power point presentation with a series of 1 to 2 minutes video clips
- CAMELIA – [www.atlas.ch/camelia](http://www.atlas.ch/camelia)
- AVION – [www.atlas.ch/avion](http://www.atlas.ch/avion)
- New 3D movie – looking into producing an update version with more physics
The ATLAS garden project features the development of a Path, connecting the garden of CERN’s Globe of Science with the ATLAS Visitor Centre, and an adjacent Pavilion, designed to exhibit real parts of the detector in a fascinating and interactive way.
AVC Phase II
THE ATLAS GARDEN

GUIDELINES

- Channel visitors from the Globe to the visitor centre
- Complement the content of the ATLAS visitor centre, with focus on the real components of detector and the physics
- Be Ecological; Green Construction, Solar Panels
- Be intuitive and easy to understand, independent of language or cultural background
VIRTUAL VISITS

Goal
- Invite Remote Participants to Visit Point 1

Technology
- EVO + Webcast
  - [http://cern.ch/atlas-live-virtual-visit](http://cern.ch/atlas-live-virtual-visit)
  - Public Site, Primarily for Parents, Collaboration Members

Requirements for Remote End
- Good Network with Cable
- Recent Laptop
- Echo-Cancelling Microphone
- At Least One Test
Recent Events

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
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<tbody>
<tr>
<td>19 March</td>
<td>Kobe University, Japan</td>
<td>Assembly of Students and General Public, Organized by Yuji Yamazaki</td>
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<tr>
<td>5 April</td>
<td>University of Birmingham, UK</td>
<td>Assembly of Students at End of Masterclass, Organized by John Wilson</td>
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<td>24 May</td>
<td>William Floyd High School, New York USA</td>
<td>Assembly of Science Students Organized by Helio Takai, Christina Brazzelli (Teacher)</td>
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<td>5 June</td>
<td>World Science Fair, New York City USA</td>
<td>Exhibit on ATLAS, Science of LHC Organized by Kyle Cranmer</td>
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<tr>
<td>7 June</td>
<td>Marshfield High School, Coos Bay, Oregon USA</td>
<td>Two High School Physics Classes Organized by Jonathan Hill, Myself</td>
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<tr>
<td>9 June</td>
<td>Melbourne, Australia</td>
<td>Opening of New Physics Centre, Visit by Minister, Organized by Geoffrey Taylor</td>
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<td>23 June</td>
<td>University of Cincinnati, USA</td>
<td>Quarknet Teachers Organized by Ken Cecire</td>
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<td>23 Sept</td>
<td>2 OTHER UNIVERSITITES</td>
<td>During Researchers Night</td>
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<tr>
<td>Lastweek</td>
<td>SciTech 2011 in London</td>
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Kobe University, Japan

11/5/2011

c.mafcelloni
World Science Fair, NYC
The French version of the pop-up book was launched on the 25th October at the CNRS Entrée en Matière exhibition at the Trocadero in Paris.

Emma Sanders and Nikola Makovec gave a talk about the book and latest news on ATLAS respectively.

The event was a great success.

http://cdsweb.cern.ch/record/1386635
THE ART OF ATLAS:
In Stockholm

A multimedia installation combining photos and film about ATLAS physicists was seen for more than 10,000 visitors at the Birmingham Science Museum from mid October 2010 until Jan 2011.

The simple format of 4 projections can be adapted for any space.

The University of Stockholm is currently holding it until beginning of next year.

This installation is available for all ATLAS institutes to take to their local museums.

http://www.atlas.ch/multimedia-installation.html
TRAM INAUGURATION - APRIL 30TH

Actors doing “improvisation” in the tram

Main activities took place at Meyrin village
TRAM INAUGURATION - APRIL 30TH

ATLAS visit center was open from 13:00 to 17:00

We estimate that at least 500 people visited ATLAS during the event
« Dans la peau d’un chercheur » vise à sensibiliser les élèves des écoles primaires à la démarche expérimentale. Trente classes d’enfants de 10 à 12 ans du Pays de Gex et du Canton de Genève sont inscrites.

Chaque classes recevra des boîtes contenant les mêmes objets mais qui ne peuvent être ouvertes. En février et mars, les classes vont émettre des hypothèses, proposer et réaliser des expériences pour déduire ce qu’il y a dans la boîte.

En avril et mai, les classes visiteront le CERN ou le PhysiScope (atelier pédagogique de l’Université de Genève). Au CERN, les classes visiteront l’une des 4 expériences du LHC ou le laboratoire de cryogénie.

Centre de visite d’ATLAS les dates sont :
- Vendredi 15 avril de 14h15 à 15h45
- Jeudi 12 mai de 14h15 à 15h45
- Jeudi 19 mai de 14h15 à 15h45
- Mardi 24 mai de 14h15 à 15h45

Three groups consisting of 12 young people, aged between 14 and 17 years old. Two Francophone and one Anglophone.

Format:
- 20 mins. introduction to ATLAS on 1st Floor
- 30 mins. in the ATLAS Control Room with Shifters
- 5 min. snack stop
- 1 hour on 2nd Floor looking at Higgs candidates with Persint, including a 10 min. intro from Laurent Chevalier

Each participant was given a printout of the event after selection of the good tracks, as well as a diploma and a souvenir pack of CERN playing cards

It was a great success with most of the kids finishing the evening with a smile on their face
Reference Material:

PHOTOS

http://cdsweb.cern.ch/record/1384782

http://cdsweb.cern.ch/record/1385537

BLOG

http://pdg2.lbl.gov/atlasblog/?p=861

NEWS on ATLAS.ch


MEDIA COVERAGE ON LOCAL TV TSR