



Collaborative Tools Track

Summary

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&
UK National e-Science Centre**



Collaborative Tools Track

- **2 talk Sessions + 1 poster session**
 - 11 Talks
 - 8 posters
 - **Topics**
 - Video and audio meeting tools
 - Interdisciplinary collaboration
 - Improved CERN services
 - "extra dimensions"
 - ... and some others
 - **I noted some negative progress as I put the summary together**
 - .ppt -> .pptx
 - You cant 'nick your colleagues slides so easily now
-
-

Video and Audio meeting tools



Steve Goldfarb (U of Michigan)

Summary of Collaborative tools and the LHC

- **LCG RTAG 12 Findings**
 - Usage & Needs Greatly Increasing, But...
 - No Central, Coordinated Project for the LHC
 - Conference Rooms Out-Dated, Not Enough
 - Phone Service Limited Hours, Not Integrated with Video Conferencing
 - No Uniform Recommendations for Remote Participant
 - Limited Lecture Archival Capabilities
 - Creation of RCTF (Remote Collaboration Task Force)
 - Resources from Atlas and CMS + staff from cern
 - Significant upgrades to video meeting (ESNet and EVO)
 - Automated phone conferencing
-
-

Shaping Collaboration 2006

11-13 December 2006

Centre International de Conférences Genève

x

➔ Home Page

▼ Registration

♦ Modify my registration

➔ List of Registrants

➔ Remote Participation

➔ WACE 06

➔ Meeting Venue

➔ Timetable

➔ Bus Schedule

➔ Hotels

➔ Geneva

➔ Currency Converter

✉ support

Home

Shaping the Future of Collaboration in Global Science Projects

A Conference Sponsored by

**Workshop on Advanced Collaborative
Environments**

and

CERN Large Hadron Collider Users

Conference Goals

Shaping Collaboration 2006 will bring together members of the user community of the CERN Large Hadron Collider with researchers and practitioners in the area of advanced collaborative tools. This three day conference will focus on ways these communities can work together to advance research in collaboration while meeting the needs of global science projects.

Session Topics

- The Human Component of Collaboration
- Views from the LHC
- The Impact of Geography
- Collaborative Tools and Developing Countries
- Collaborative Tools, Education and Training
- A Vision for the Future
- Funding Models and Strategies for Collaborative Tool Support in Scientific Projects
- Frontiers in Collaborative Tool Research (**WACE** 2006)

Organizing Committee

- R. Eisberg (DESY)
- P. Galvez (CMS, Caltech)



Video Conferencing improvements: ECS and EVO:

Video Conference Systems (cont.)

- *ECS (ESNet Collaboration Services) [input from Bill Johnston, Sheila Cisko]*
 - *Hardware Upgrade to 3 Codians with Video & Web Conferencing*
 - *120 Ports (40 Ports per MCU), 384k Access for ISDN Systems*
 - *Access to Audio through Codian ISDN Gateway*
 - *Content (H.239) Viewing and Markup via the Web*
 - *Web Chat for those without Traditional Video Conferencing System*
 - *Access to Global Dialing Scheme (GDS) via Radvision Gatekeeper*
 - *Outsource of Maintenance & Operations*
 - *Savings Expected to Finance Upgrades in 2008 (East Coast Facility)*
 - *Real-Time Conference Support Available for a Fee*



Phillipe Galvez (Caltech)

EVO - daughter of VRVS

- **EVO**

- EVO = Enabling Virtual Organisations
- Much more resilient to equipment and network change
- EVO creates dynamic overlay network which adapts transparently to the user
- JRAT / ViVEO
- Meeting recording and playback
- File exchange
- Private sidebar meetings

Cures MacOS "underwater" problem

Koala in Meeting Interface

The screenshot shows the Koala web interface for a team meeting. The main window displays a grid of video thumbnails for participants: Phil Galvez, Laurence Galvez, Marek Domaracki, Dave Adamczyk, 胡友进行交流, Philippe Galvez, and Count Dracula. Below the grid are controls for Video, Audio, and Whiteboard. The left sidebar lists 'My EVO Buddies' and 'My EVO Communities'. The bottom right shows a chat log with messages from participants. Annotations with red arrows point to specific features:

- Participants of the current meeting**: Points to the video thumbnails of the meeting participants.
- Control Audio, Video and Whiteboard**: Points to the Video, Audio, and Whiteboard control buttons.
- Exchange/Share files**: Points to the 'Shared Files' tab in the top navigation bar.
- Open/Close Recorder & Playback**: Points to the recorder icon in the top right corner.

Chat Log:

Time	Participant	Message
[Aug 23 10:22]	Phil Galvez	no
[Aug 23 10:22]	Rasto Adamek	no
[Aug 23 10:22]	Martin Harcar	no
[Aug 23 10:23]	Stefan Zavoda	no
[Aug 23 10:26]	Rasto Adamek	bye Greg
[Aug 23 10:28]	Rasto Adamek	michal is stripper
[Aug 23 10:28]	Michal Pauliny	stfu
[Aug 24 17:27]	Laurence Galvez	2.6.11-1.14_FC3
[05:27:52]	Rasto Adamek	serus viktor
[05:40:41]	Viktor Michalcin	ahoj
[16:58:49]	胡友进行交流	joined
[16:59:13]	Philippe Galvez	joined
[17:00:02]	Count Dracula	joined

Connected to Panda EVO2_US 17:00:58

ViEVO Application (6/7)

The screenshot displays the ViEVO application interface, which is divided into several main sections:

- MonALISA (Top Left):** A network map showing connections between various nodes. The map includes a 3D view and a 2D view. The 2D view shows a network of nodes connected by lines, with labels for nodes like EDU_SK, ZILINA_SK, WIND_IT, UKERNA1_UK, TSUKUBA_IP, Count Draw, Phil Galvez, EVO TV, James T. Kirk, Joseph Spacawento, Heather Kelly, Francisous van Uingen, Dave Adamczyk, Joao Fernandes, CERNNext_CH, DESY_DE, UKERNA_UK, Yoda Master, Martin Harcar, UPJS_SK, John McClane, STUBA_SK, Stefan Zavoda, and Rasto Adamek. The interface also shows a 'Nodes' section with a 'No. of audio clients' and a 'Links' section with 'Internet RTTime Quality' and 'Peer Mean quality / 2h'.
- Koala - Michal Pauliny in Team Meeting (Top Middle):** A window showing the current meeting. It includes a 'Current Meeting' section with a grid of video feeds for participants: Michal Pauliny, Dave Adamczyk, Phil Galvez, Viktor Michalch, Pavel Farkas, Martin Harcar, John McClane, Yoda Master, Marek Domaracký, Joao Fernandes, and a 'Leave this meeting' button. Below this is an 'Available' section with a list of participants and their status.
- viewo: Team Meeting (Top Right):** A window showing the team meeting. It includes a 'CAMERA' section with a 'SIZE' button and a 'SHOW' button. Below this is a list of participants with their video feeds and status: Michal Pauliny Vista (CAM 24 f/s 266 kb/s (CIF)), Dave Adamczyk (CAM 27 f/s 733 kb/s (CIF)), Yoda Master (CAM 25 f/s 55 kb/s (CIF)), Pavel Farkas (CAM 24 f/s 316 kb/s (CIF)), and Stefan Zavoda (CAM 24 f/s 180 kb/s (CIF)).
- ViewoDisplay (Bottom):** A large window showing a grid of video feeds for participants. The feeds are arranged in a grid, with the central feed showing Pavel Farkas. The participants shown include Viktor Michalch, Yoda Master, Marek Domaracký, Phil Galvez, Stefan Zavoda, and Michal Pauliny Vista.

The bottom of the screen shows the Windows taskbar with the following open applications: MonALISA, Java Console - Koala, Koala - Michal Pauli..., viewo: Team Meeting, ViewoDisplay, and miting5 - Skicár. The system clock shows 19:05.



Meeting Player

Playback a full EVO meeting from your local disk.

- The playback could be:
 - Local (*for your eyes only*)
 - Broadcasted
- Possible to PAUSE the playback
- You can go to the previous/next pre-recorded marks
- Possible to play:
 - Audio
 - Video
 - Whiteboard
 - Chat
 - Participants



Douglas Smith (SLAC)

Hypernews - bigger and better

- **Used extensively**
 - BaBar
 - CERN experiments (particularly ATLAS)
 - Open source project



BABAR

Search the BaBar HyperNews index
[Searching help for using this index](#)
E-mail comments to: [Douglas Smith](#)

test Search!

Limit search to: ☒ Subject & Body ☐ Subject ☐ Document Path ☐ From ☐ Full Name ☐ Forum

Sort by: Rank ☐ Reverse Sort

Limit to: ☒ All ☐ Today ☐ Yesterday ☐ This Week ☐ Last Week ☐ Last 90 Days ☐ This Month ☐ Last Month

Select Date Range Sep 3 2007 through Sep 3 2007

Results for test 1 to 15 of 55475 results.

Run time: 0.076 seconds | Search time: 0.039 seconds

Page: 1 2 3 4 5 6 7 8 9 10 3699 Next 15


1 [Re: Exercise: computing database sizes](#) - rank: 1000

... are the sizes for the V5 fdb: 563806208

/objy/databases/test/physics-opr/V5/events/groups/AllEvents/col/col004000-006000/evs_g_AllEvents_col0040495468544

/objy/databases/test/physics-opr/V5/events/groups/BackgroundStream/col/col004000-006000/evs_g_Backgro559054848

- 29 Updates to HN Edit Message page by Peter Elmer, Jan 15, 08:02
 - 1 Re: Updates to HN Edit Message page by Shahram Rahatlou, Jan 15, 08:14
 - 2 Re: Updates to HN Edit Message page by Traudl Hansl-Kozanecka, Jan 15, 10:28
 - 1 Re: Updates to HN Edit Message page by Peter Elmer, Jan 15, 10:39
 - 3 Re: Updates to HN Edit Message page by Dmitriy Kovalskyi, Jan 19, 15:28
- 28 Color of already visisted messsages by Frank Winklmeier, Jan 11, 09:56
 - 1 Re: Color of already visisted messsages by Peter Elmer, Jan 11, 10:09
 - 1 Re: Color of already visisted messsages by Frank Winklmeier, Jan 11, 11:18
 - ... 1 Message(s)
 - 2 Re: Color of already visisted messsages by Douglas Smith, Jan 11, 11:42
- 27 Re: Reverse time order in "Recent Postings" by Peter Elmer, Dec 14, 19:58
- 26 direct mails and mails to HN subscribers by Peter Elmer, Dec 11, 23:55
 - 1 Re: direct mails and mails to HN subscribers by Dmitriy Kovalskyi, Dec 12, 00:49
 - Re: direct mails and mails to HN subscribers by Peter Elmer, Dec 12, 01:00

LSST HyperNews at hypernews.slac.stanford.edu Forum List by Category				Member: douglas (logout)
	Forums by Category	Recent Postings	Member Info	Overview Administration Contact Admin
	Forums by Time Order	Search in Forums	Members List	
	Request a New Forum	Subscribe to Forums	New Member	

- **Lots of improvements**
 - Attachment support
 - SPAM control
 - ...
- **Will be supported well into LHC**

Jeremy Herr (U of Michigan)

Lecture & Video meeting Archives

The screenshot shows a web browser window displaying a presentation slide titled "Physics Analysis Part 1" by Assamagan, Ketevi. The slide content includes a terminal window showing commands and output for setting up a tutorial directory and checking requirements.

Slide Content:

- 0.2 Create a directory called tutorial**
- 0.3 Check that my requirements file is set for 11.0.3**

Terminal Output:

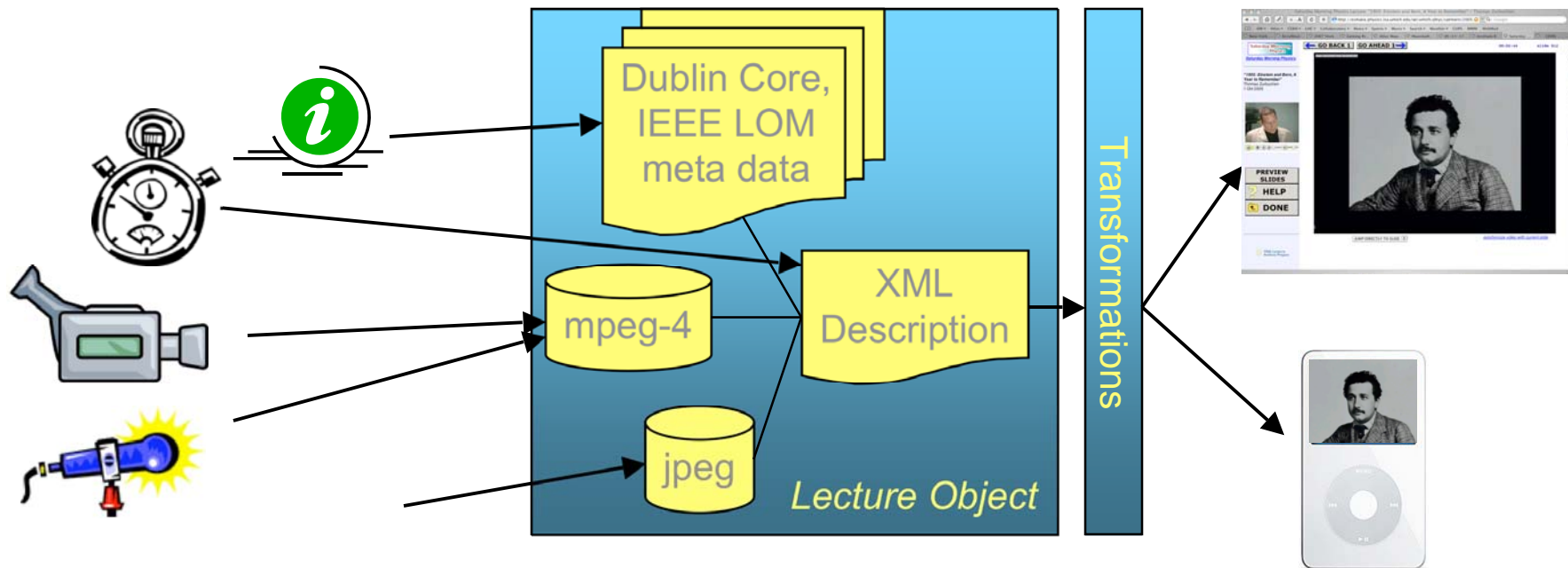
```
[acas0200] ~ > kls
[acas0200] ~ > cd
[acas0200] /afs/u
tutorial1004.html
tutorial1103.html
tutorial1104.html
tutorial1870.html
[acas0200] /afs/u
Analysistutorial1
[acas0200] /afs/u
[acas0200] /afs/u
[acas0200] /afs/u
[acas0200] ~ > |
#####
set CMTSITE bnl
set SITEROOT /afs/usatlas.bnl.gov
macro ATLAS_DIST_AREA $(SITEROOT)/software/dist
macro ATLAS_TEST_AREA ""
11.0.3
"$(HOME)/tutorial"
#####
use AtlasLogin AtlasLogin=" $(ATLAS_DIST_AREA)
#####
Then do this:
source /afs/usatlas.bnl.gov/cernnew/contrib/CMT/vir18p20050501/wgs/setup.csh
make -nncFile
```

Navigation and Interface:

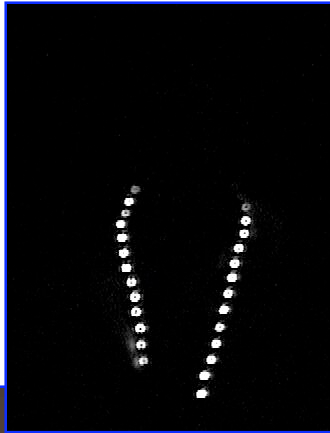
- Buttons: GO BACK 1, GO AHEAD 1
- Time: 00:02:25
- Slide: slide 004
- Buttons: PREVIEW SLIDES, HELP, DONE
- Buttons: JUMP DIRECTLY TO SLIDE, synchronize video with current slide

Lecture Objects

- Originally proposed by our team in 2000 at in international conference
- A standardized data object containing metadata, timing, high-res media
- Designed for
 - Longevity
 - Sharing among multiple institutions
 - Flexibility in viewing formats



Mscribe - Lecture recording Robot



**Interdisciplinary
collaboration
with medical sciences**



Richard McClatchey (UWE-Bristol)

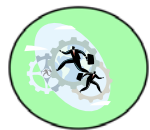
Health e-Child project

- **Three Paediatric Diseases**
 - Heart diseases (*Right Ventricular Overload, Cardiomyopathy*)
 - Inflammatory diseases (*Juvenile Idiopathic Arthritis*)
 - Brain tumours (*Gliomas*)
 - **Many Clinical Departments**
 - Cardiology
 - Rheumatology
 - (Neuro-)Oncology
 - Radiology
 - Lab (Genetics, Proteomics)
 - Administration, IT
 - **Main Modalities / Data Sources**
 - Imaging (MR, US/echocardiography, CT, x-ray)
 - Clinical (Patient information, Lab results etc)
 - Genetics & Proteomics
-
-

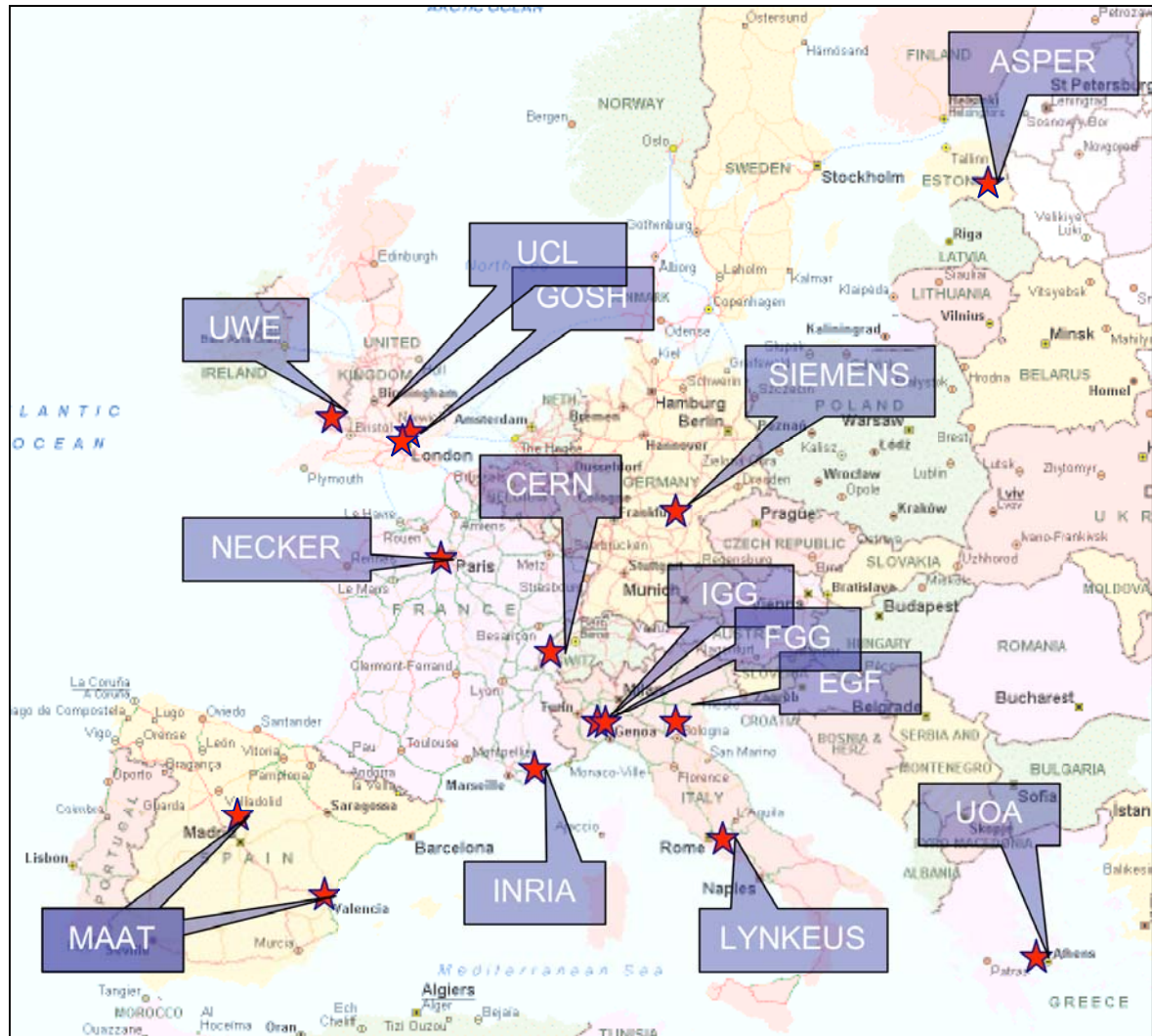
A Geographically Distributed Environment



Clinical Site

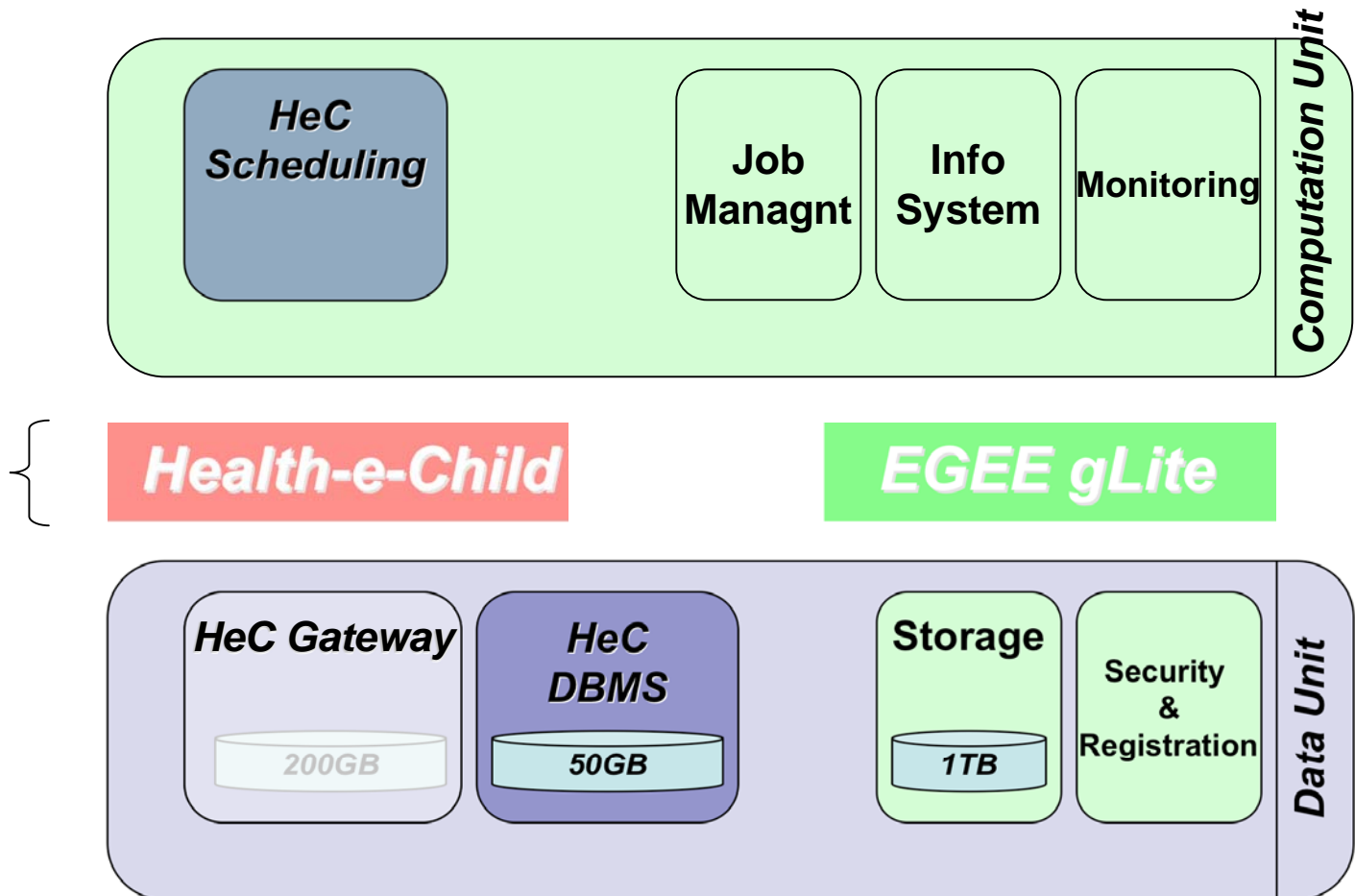


R&D Site



The Health-e-Child Access Point

One Access
Point



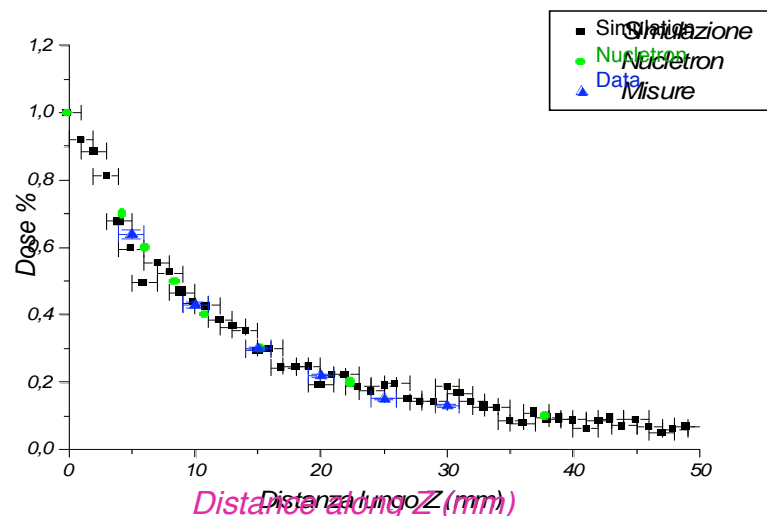
Maria Grazia Pia (INFN-Genova)

Italian National
Institute for
Cancer Research

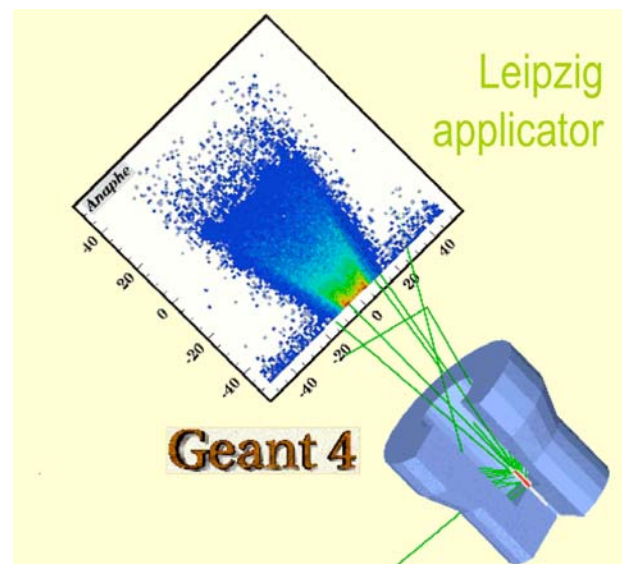


Geant4 simulation of radiotherapy

Brachytherapy Example



Exp. data: F. Foppiano et al., IST Genova



Relatively “fast” simulation

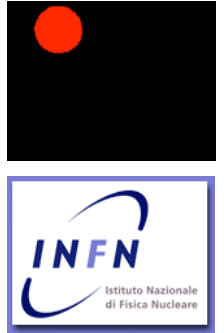
~ 7 CPU hours on an “average” PC to
produce meaningful statistics for clinical
studies

On the grid

64% runs terminated < 30 min
96% runs terminated < 40 min

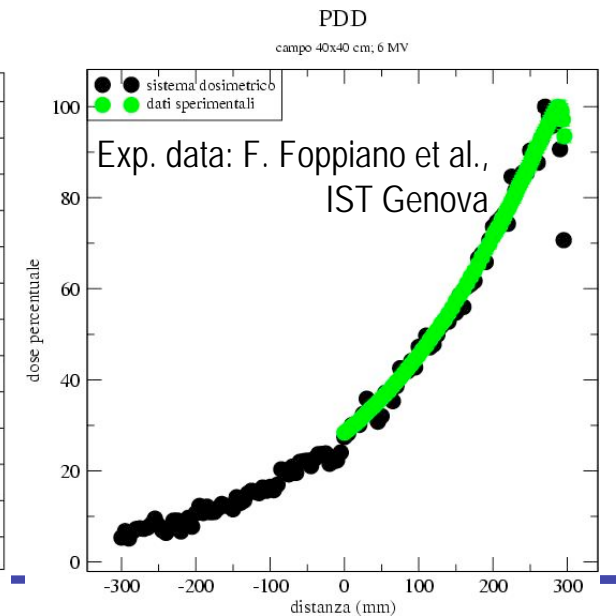
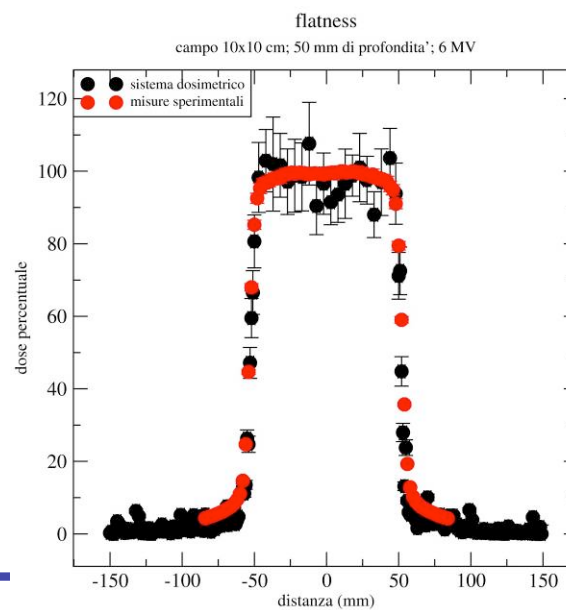
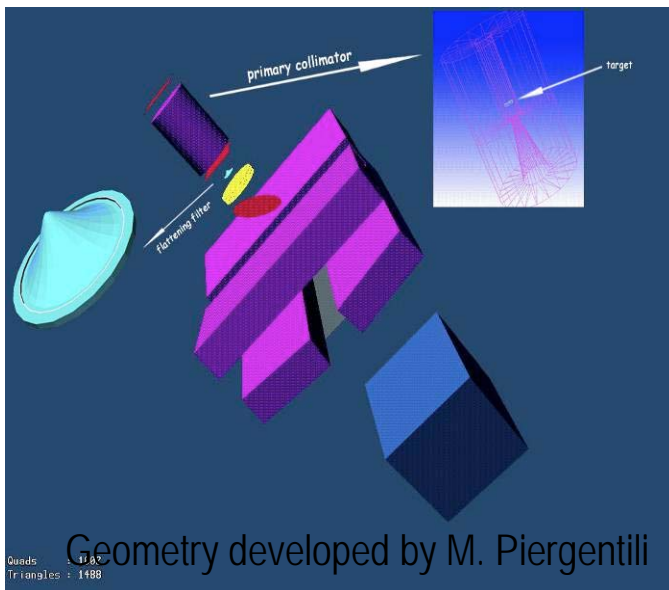
Medical LINAC for IMRT

Italian National
Institute for
Cancer Research



Geant4 medical_linac Advanced Example

High demand of CPU resources for
meaningful statistics
(e.g. for treatment planning verification)
≈ tens of CPU-days

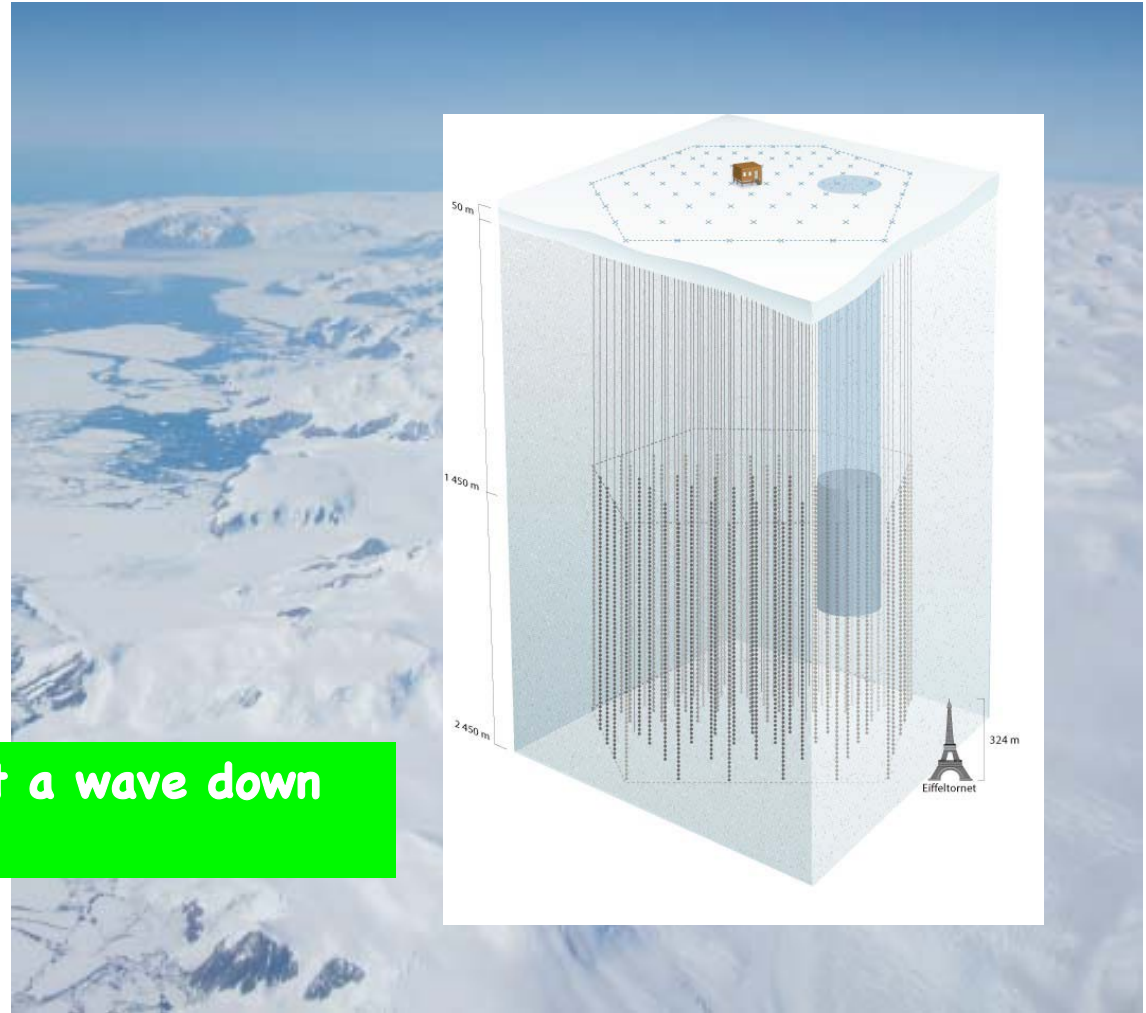


Keith Beattie (LBNL)

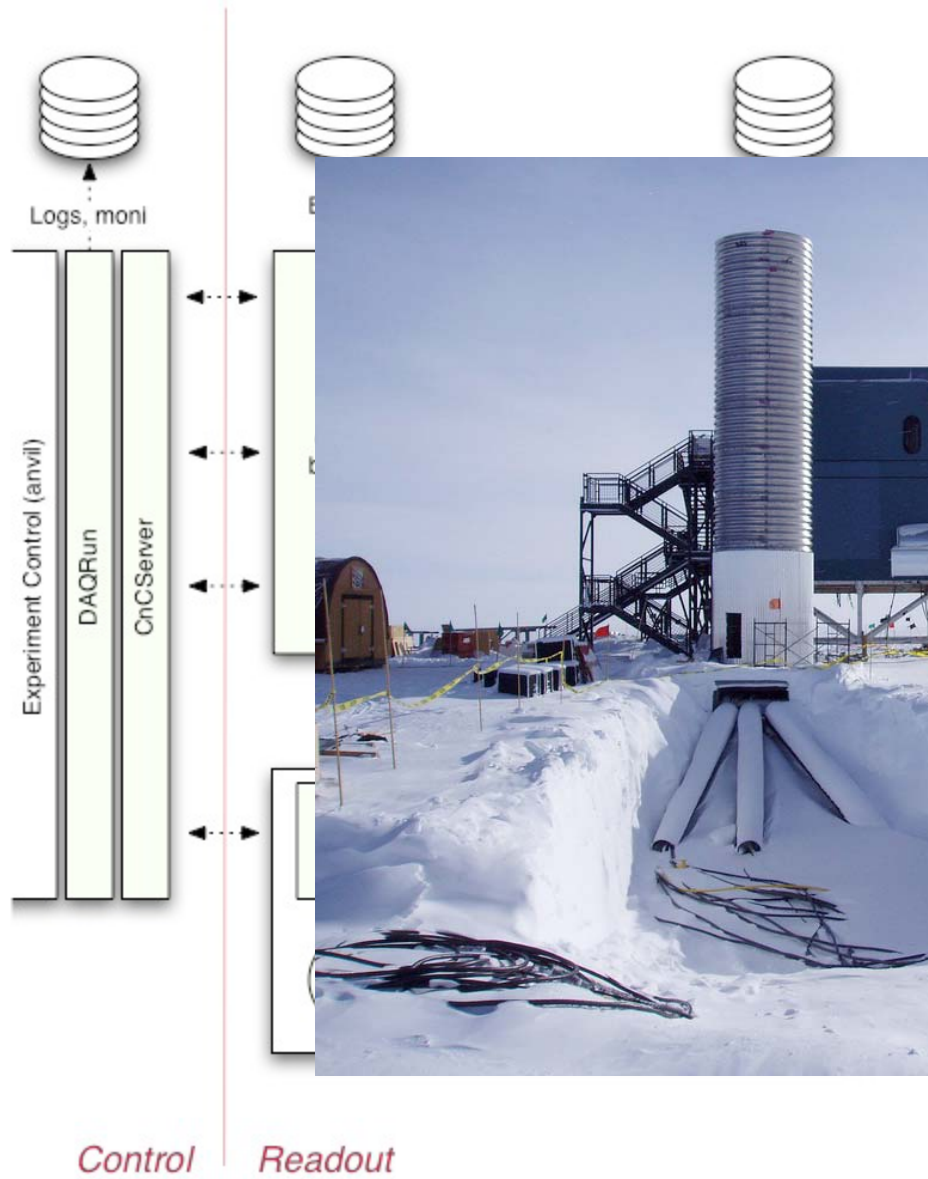
Ice Cube Data Acquisition

- Unique challenges
- Staff are not exactly centred at the experiment (at least for half the year)
- Needed "agile" methods

I challenge Harvey to get a wave down there !!!!!



pDAQ System



CERN Developments



Nicholas Robinson (CERN)

Managing an Institutional Repository with CDS Invenio

- 1,000,000 records
- 10,000 unique searches per day
- Powerful in house designed search engine
- Customisable for different types of entry
- Customisable approval workflows

The screenshot displays the CERN Document Server's Invenio interface. At the top, the header includes the CERN logo, the title "CERN Document Server's Invenio", and user information: "N. Robinson; JY. Le Meur; T. Simko; CHEP 07". Below the header is a navigation bar with links: "Home", "Search Results", "Search", "Submit", "Convert", "Agenda", "Webcast", "Bulletin", and "Library". The main content area is titled "CERN Document Server" and features a search form. The search form has a "Search:" label, a text input field containing "lhc", a dropdown menu set to "any field", and "Search" and "Browse" buttons. Below the search form is a "Search collections:" section with a dropdown menu set to "*** any collection ***". To the right of the search form are links for "Search Tips" and "Advanced Search". Below the search form is a section for "Sort by:", "Display results:", and "Output format:". The "Sort by:" section has a dropdown menu set to "latest first". The "Display results:" section has a dropdown menu set to "10 results". The "Output format:" section has a dropdown menu set to "HTML brief". Below these sections is a "Results overview:" section with the text "Found 29,797 records in 0.05 seconds." and a list of search results: "Articles & Preprints, 19,586 records found", "Books & Proceedings, 184 records found", "Presentations & Talks, 197 records found", "Periodicals & Progress Reports, 50 records found", "Multimedia & Outreach, 7,100 records found", and "Archives, 2,680 records found". Below the results overview is a section for "Articles & Preprints" with the text "19,586 records found" and a "jump to record:" dropdown menu set to "1". Below this section is a list of search results, with the first result being "1. Coordinate-space picture and $S_{\lambda\lambda}$ singularities at fixed $S_{\lambda\lambda}$ / Hautmann, F". The result text includes a description of the paper and a link to the full text: "arXiv:0708.1319; 10 Aug 2007 -> mult. p Fulltext".



Format: [HTML](#) | [BibTeX](#) | [DC](#) | [EndNote](#) | [NLM](#) | [MARC](#) | [MARCXML](#)



High Energy Particle Accelerators

WARNING The use of videos requires [prior authorization](#) from CERN.



Film about the different particle accelerators in the US. Nuclear research in the US has developed into a broad and well-balanced program. Tour of accelerator installations, accelerator development work now in progress and a number of typical experiments with high energy particles. Brookhaven, Cosmotron, Univ. Calif. Berkeley, Bevatron, Anti-proton experiment, Negative K meson experiment, Bubble chambers. A section on an electron accelerator. Projection of new accelerators. Princeton/Penn. build proton synchrotron. Argonne National Lab, Brookhaven, PS construction. Cambridge Electron Accelerator; Harvard/MIT. SLAC studying a linear accelerator. Other research at Madison, Wisconsin, Fixed Field Alternate Gradient Focusing. (FFAG) Oakridge, Tenn., cyclotron. Two-beam machine.

Comments: Interesting overview of high energy particle accelerators installations in the US in these early years. .

Produced by: Audio Productions, Inc, New York

Director: Atomic Energy Commission

35:00 min. / 1960 / AEC Copyright

Keywords: [accelerators](#), [particles](#), [cosmotron](#), [cyclotron](#), [proton synchrotron](#), [linear accelerator](#)

Original Source: P104

Language: eng

Source Medium: BETACAM PAL (Master)

Note: Original film : 16 mm, optical sound

Reference: CERN-MOVIE-1960-005

View Movie

(Choose quality)

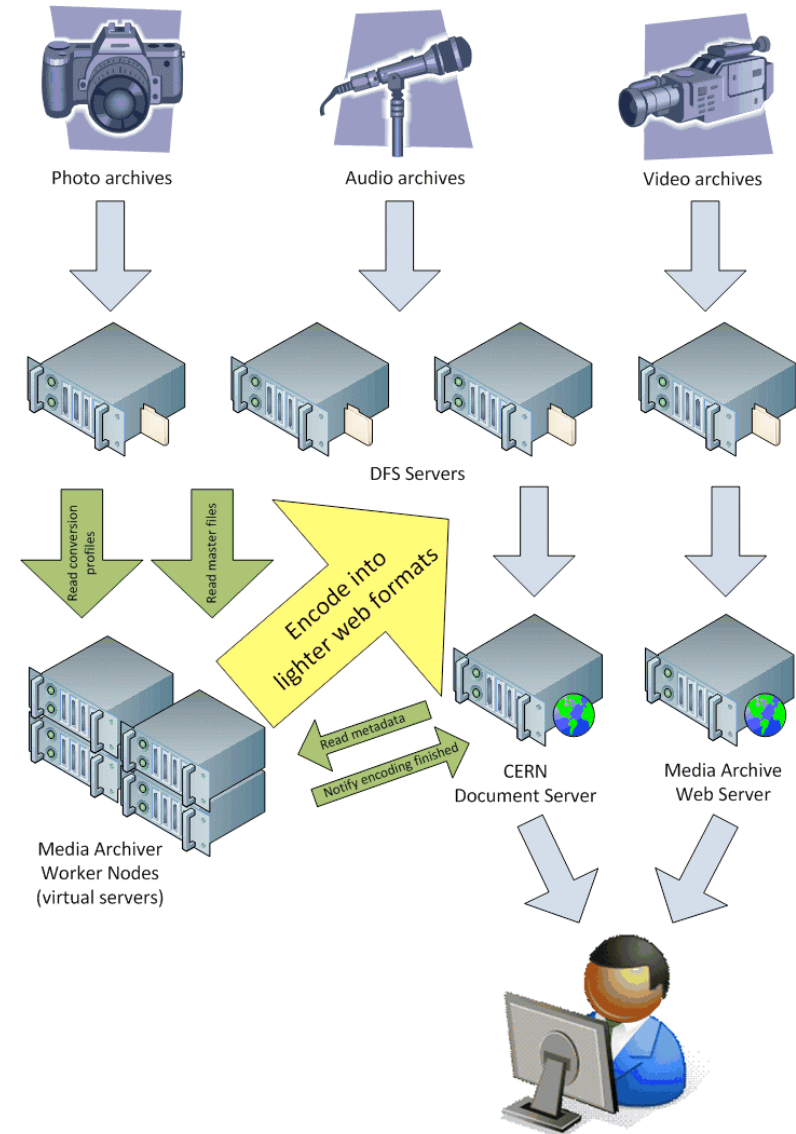
[Low](#) [Medium](#) [High](#)

(128 kbps) (400 kbps) (1000 kbps)

[How to view our videos?](#)

- **Emmanuel Ormancey : Single Sign on (talk)**
 - Previously needed 6 credentials
 - Now down to 2
 - Lots of work behind scenes here
 - **RSS Alerter (poster)**
 - New alert system based upon RSS feeds
 - Easy to subscribe to from all platforms
 - No excuse for not knowing that some service is going down
 - ...or the world cup football score..
 - **Printing at CERN (poster)**
 - Much simplified backend print server architecture at CERN
 - As a user I was pleasantly surprised how easy printing has become
-
-

- **Video, Picture and Audio Archiving**
 - Automatic processing and archiving of huge resources
 - All available from web document server



Other contributions:

- **Giulio Eulisse (Northeastern U) : Talk CMS WEBTOOLS**
- **Poster: GridPP Collaboration Website**
- **Poster: Aragats Data Acquisition System for distributed detectors**



Norman Graf (SLAC)

Extra Dimensions

*Adding 3D and time to
embedded pictures*

Adobe reader already supports this via standards (U3D)

