

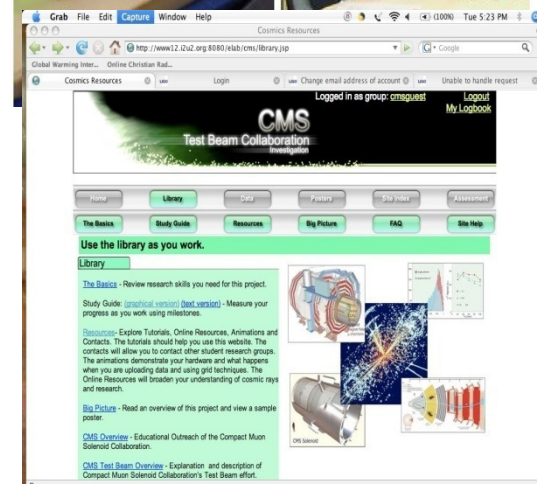


U. S. CMS Education & Outreach



Don Lincoln
Fermilab

USCMS JTERM-III
Fermilab
13-January-2009





LARGE HADRON COLLIDER



2008 Highlights: Open Days [April 2008]

- US CMS had a significant presence at open days



Estimates from CERN are that 70,000 people attended the open days.

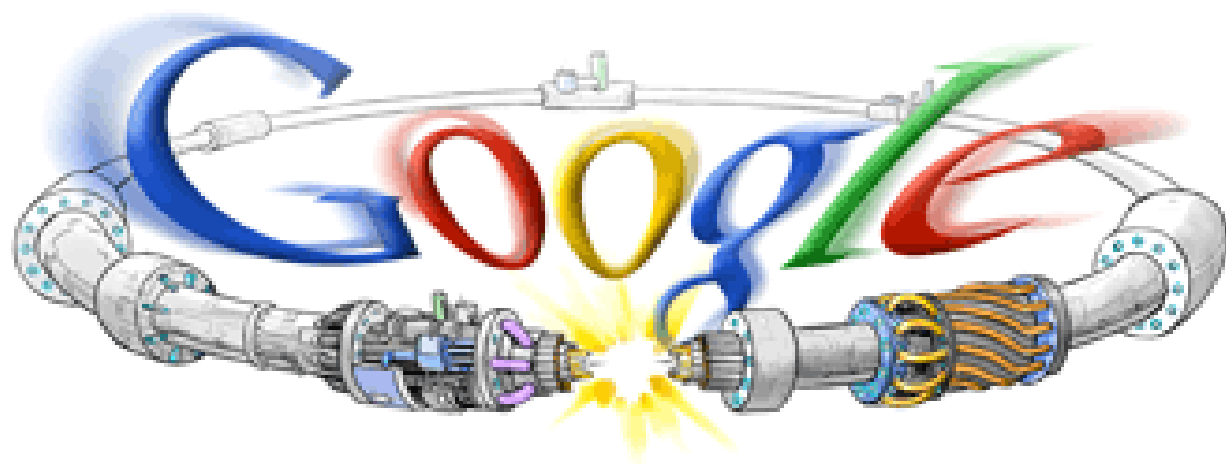


USCMS Collaborators demonstrate CMS technology with the CRiL detector in SX5

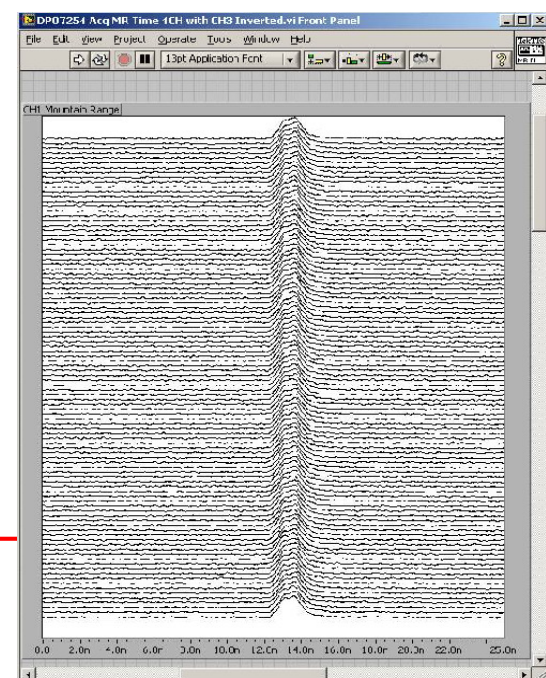


2008 Highlights: First Beam [September 2008]

- Biggest media event



Briefly, “NASA-like”
press coverage





2008 Highlights:

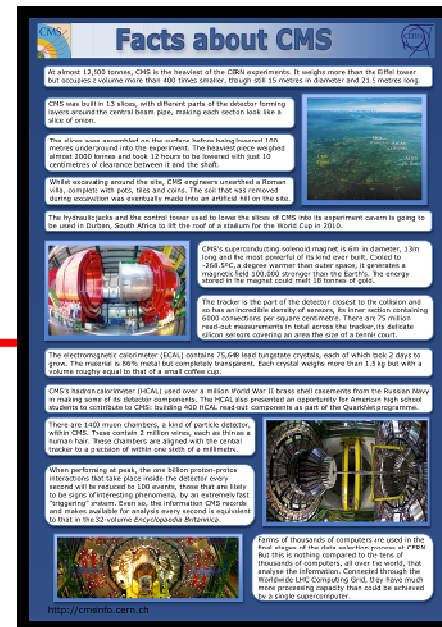
October: Grid and Inauguration





Other Projects [2008]

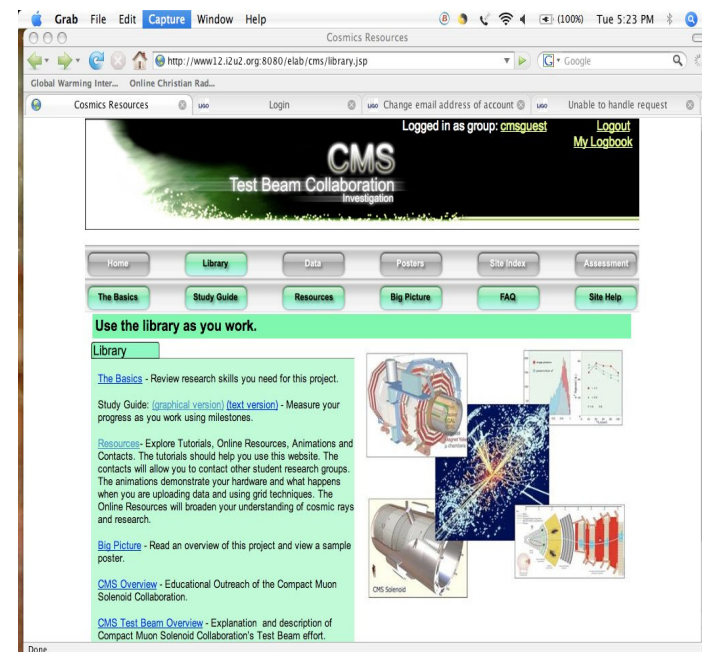
- Fact sheet
- Fantastic LHC FAQ book
- Trinkets and doodads
 - Calendar 2009
 - Magic Cubes & Prisms
 - T-shirts, caps, key rings
 - CMS Photo Book





Ongoing Things [Karmgard]

- Web-based CMS data analysis tool for students and interested amateurs.
 - Elab [www.i2u2.org]
- CMS Fellow program
 - Finance teachers for a summer [typically 8]





Poll Results [Fall 2008]

- Education
 - Quarknet
 - Open house days
 - Occasional REU during construction phase
- Outreach
 - Occasional local lecture
 - Web site work

Not responding: Boston, Brown, UCLA, UCSD, CalTech, Carnegie Mellon, Colorado, Fairfield, Florida, FIT, UIC, Iowa, John Hopkins, Livermore, MIT, Minnesota, SUNY Buffalo, Northwestern, Ohio, Puerto Rico, Rice, Rochester, Rutgers, Tennessee, Vanderbilt, Wisconsin



Things in the Queue #1

- Virginia 8-10 May 2009
 - Media training & Outreach planning
- Preplanning [Getting together an E&O Core]
- New LHC Rap (Alpinekat)
 - “It’s dumb to worry about black holes.”
- LPC/ROC/USCMS videos
 - Short (3-5 minutes) [Video for one taken this week.]
 - To show outside ROC, on web, for universities to use



Things in the Queue #2a

- LPC/ROC Local classroom visit program
 - Modeled on successful 2005 “World Year of Physics”
 - A couple of pre-made lectures
 - LHC Physics [Higgs, Extra dimensions, black holes]
 - How I became a physicist [career path lecture]
 - Pilot program at Fermilab [Spring 2009], then possible roll-out nationally.



Things in the Queue #2b

- Similar to LPC/ROC Local classroom visit program
 - Have graduate students give lectures at regional APS/AAPT/AAAS meetings
 - Couple with Quarknet HS teachers giving an education lecture
 - Students give “LHC physics” or “How I became a researcher” lecture.
 - These lectures are often very short.



Things in the Queue #3

[Not USCMS specific]

- International *Angels and Demons* Lecture Night
 - One CERN/LHC/antimatter (not CMS) lecture given across the globe on one night at each participating university
 - Lecture would be in the evening in each time zone
 - Timing under discussion, to coordinate with movie release
 - May 15th ish.



Things in the Queue #4

[Not USCMS specific]

- CMS Exhibition center at P5
 - Tour guide center, lots of video screens.
 - Essentially a museum area
- CMS subdetector book for the public
 - Still in discussion phase
 - Idea is to link “Big Picture” physics with subdetectors



Things in the Queue #5

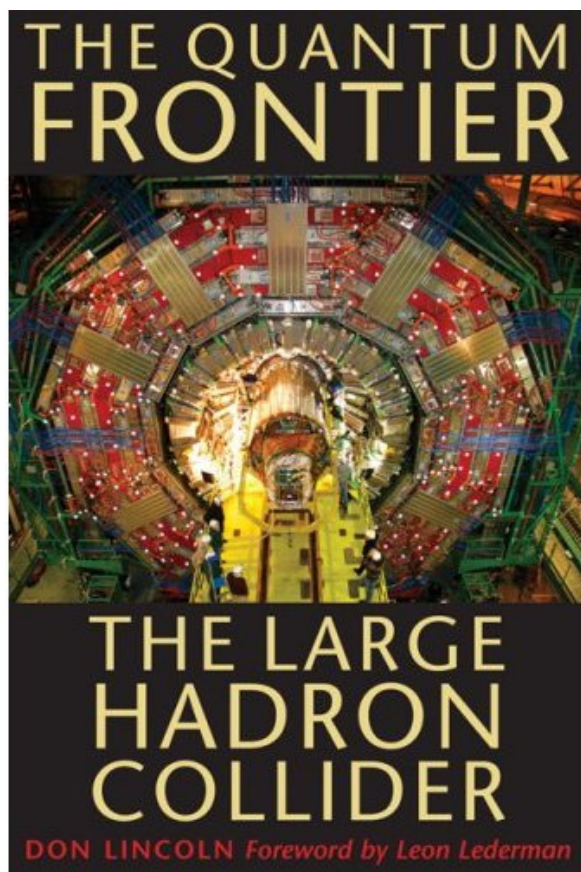
[Not USCMS specific]

- International LHC Physics Lecture Night
 - One LHC (not CMS) lecture given across the globe on one night at each participating university
 - In principle, there could be three lectures: [ATLAS/CMS], ALICE, LHCb
 - Lecture would be in the evening in each time zone
 - Timing still being thought about
 - Maybe (collisions + 6 months)
 - Want it after collisions



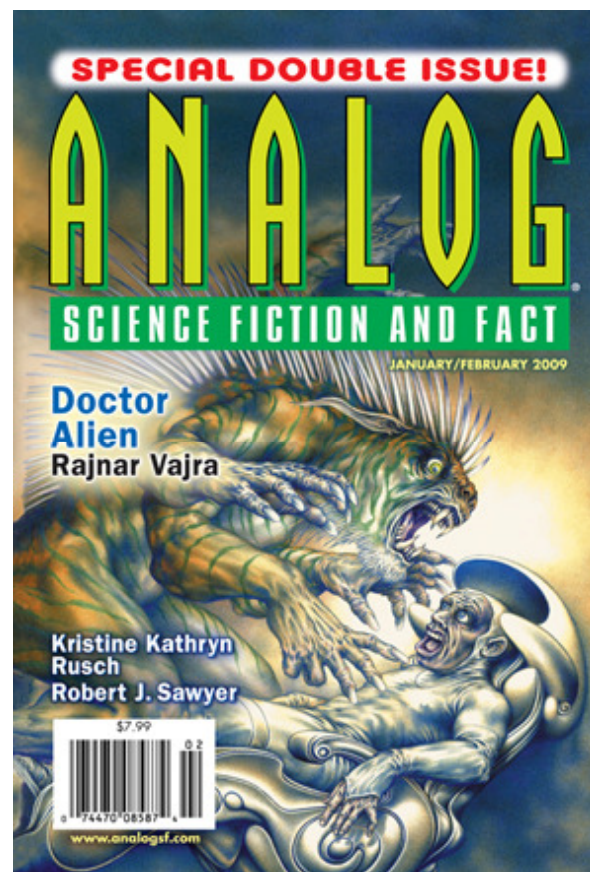
Physicist-Generated Pop Writing

[Try it, it's fun.]



“LHC for Cabbies”

Comes out mid-February 2009
www.thequantumfrontier.com



Actual cover
will be
different

LHC “Fact” article

Comes out Jul/Aug 2009 issue
www.analogsf.com



Current Personalities



Don Lincoln
LPC/ROC
USCMS



Katie Yurkewicz
CERN based



Judy Jackson
Fermilab poobah



Randy Ruchti
LPC/ROC



Elizabeth Clements
Fermilab based



James Gillies
CERN poobah



Dan Karmgard
USCMS
(official)



How You Can Help #1

- USLHC is looking for reliable bloggers
 - Contact: Katie Yurkewicz [katie@fnal.gov]
- Join E&O Core
 - Contact: Don Lincoln [lincoln@fnal.gov]
- We expect to need many speakers for Fermilab-area lectures to high/middle school kids
 - Contact: Don Lincoln [lincoln@fnal.gov]
- Will need speakers for *Angels and Demons* night
 - Contact: TBD



How You Can Help #2

- Join the effort and offer ideas
 - Keep in mind that of the E & O, we are very E heavy
 - To make an impact in O, recall to think like an advertiser. To connect with the public, we need
 - Identified market
 - Product
 - Advertising
 - Delivery system
 - Achievable with existing (or achievable) resources
 - Good ideas [especially national] welcome.
-

Tours

- Tours of DØ & CDF have been arranged
 - One at 1645 & then 1730 (you swap).
 - CDF guides in cafeteria
 - Kaori Maeshima
 - Kevin Burkett
 - DØ guides at DØ
 - Gaston Gutierrez
 - Satish Desai

