

EPPOG

European Particle Physics Outreach Group

Outline of presentation

- Part 1: Overview of recent activities (Dave Barney)
 - Reminder of EPPOG mandate
 - Status of EPPOG membership
 - Summary of Meetings in 2009
 - Milan (June)
 - CERN (October)
 - EPPOG “Best Practice” database
- Part 2: EPPOG Masterclass program development (Michael Kobel)

Reminder of EPPOG

- Role of EPPOG, as mandated by ECFA/EPS
 - promotes the outreach activities of particle physics institutes and laboratories in the CERN Member States
- Was formed ~13 years ago
 - First chaired by Prof. Frank Close (Oxford Uni.)
 - Then by Prof. Erik Johansson (Uni. Stockholm)
 - Currently (2009-2012)
 - Prof. Michael Kobel (Dresden Uni.)
 - Dr. David Barney (CERN)

EPPOG Meetings

- Meet twice per year
 - In the Autumn at CERN
 - In the Spring in a member state
- Originally EPPOG meetings were discussion forums, to explain to other members the Outreach activities being carried-out in their country (or experiment)
 - Sharing ideas
- This still forms the basis of our meetings

EPPOG Membership

- Representatives from all CERN member states + CERN + DESY + LHC experiments + USA
- Tragic death of French representative Alain de Bellefon at the end of 2008



11/26/2009

Dave Barney & Michael Kobel

EPPOG New Members



James
Gillies



CERN



Rolf
Landua



Gabby
Zegers



Netherlands



Vanessa
Mexner



Erik
Johansson



Sweden



Cecilia
Jarlskog



Guenther
Dissertori



Switzerland



HansPeter
Beck



Alain de
Bellefon



France



Nicolas
Arnaud



Greg
Snow



USA



Marge
Bardeen

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Evolution of EPPOG

- In recent times has tried to be more than a forum
 - Initiated Europe-wide Particle Physics Masterclasses for high-school students (based on an idea from the UK)
 - See next presentation by Michael Kobel
- Special sessions at recent ECSITE conferences (European network of science centres and museums)
 - Try to improve visibility of HEP in Science Centres and Museums
- Bi-annual EPPOG meetings are now focussed on particular topics

June 2009 meeting in Milan

- Focussed on HEP content in exhibitions
 - Survey of existing exhibitions in member states + USA
 - Shared experiences from dedicated static/travelling exhibitions
- Coincide with ECSITE conference (with special EPPOG session at ECSITE)
 - Presentations from Thomas Naumann & David Barney + panel discussion with Michael Kobel, Stavros Katsanevas (ASPERA), Jo Quinton-Tulloch (London Science Museum)
 - Showed how to include HEP in science centres & museums – i.e. exhibits that we know work well
 - Well received both during the session and in discussions afterwards: several centres interested in pursuing new exhibits

EPPOG survey for permanent HEP coverage in museums

Cosmology often quite well covered
 Much room for Particle Physics

country	ECSITE	Suited for perm. exh.	Covered well	Covered barely	Contacted /visited
Austria	8	1-2	0	1	1
Poland	5	2(+2)	0	0	2(+2)
Italy	8	2	0	2	2
UK	41	10-20	0	Very few	Some
Spain	25	15	3	Few	15
Denmark	5	5	1	2	?
Norway	8	5 ?	1	0	3
Slovakia	0	1	0	0	1
Portugal	14	3-7	1	0	4
Germany	27	2-5	1	~2	3
SUM	141	45-65	7	~10	> 33

October 2009 meeting at CERN

- Included a joint session with EPPCN (European Particle Physics Communication Network – professional communicators in member states, chaired by James Gillies)
 - Clarified the complementary roles of each group in, for example, LHC restart activities
 - EPPOG/EPPCN session will be a regular part of our CERN meetings
- EPPOG meeting focussed on “making LHC data available to students”
 - Discussions on physics/teaching objectives – not just for Masterclasses (see next presentation) but for several use-cases
 - Collaboration with Quarknet (USA), CERN, teachers etc.
 - Hands-on demonstrations of existing tools

EPPOG “Best Practice” Database

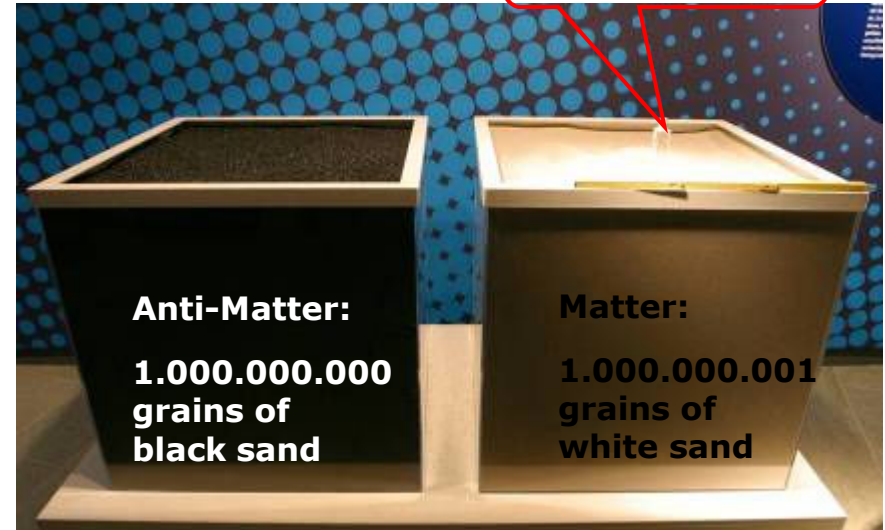
- Over the past 13 years EPPOG has accumulated huge amounts of knowledge, multimedia, presentations, exhibits etc.
- Wish to make a database of all materials as a reference store for physicists, communicators, educators, press etc.
- Need person-power (estimate ~3 months full-time to set-up and populate the database)
- Hope to have a first version for the Oslo EPPOG meeting (April 2010)

Best Practice Examples – Exhibits

Building Blocks



**1 extra grain:
our Universe !**



The “Higgs” mechanism



“Beat the Spiral Accelerator”

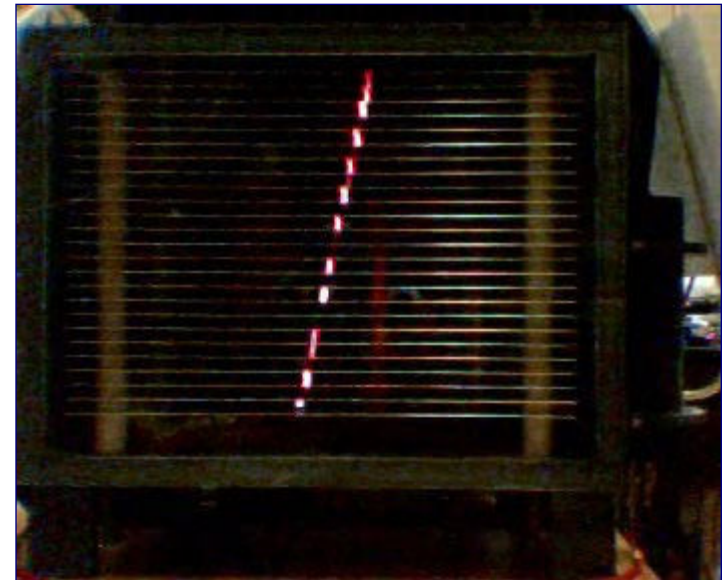


Dark Matter represented by black beans; galaxies etc. by coloured beans

Best Practice Examples – Cosmic Ray Detector

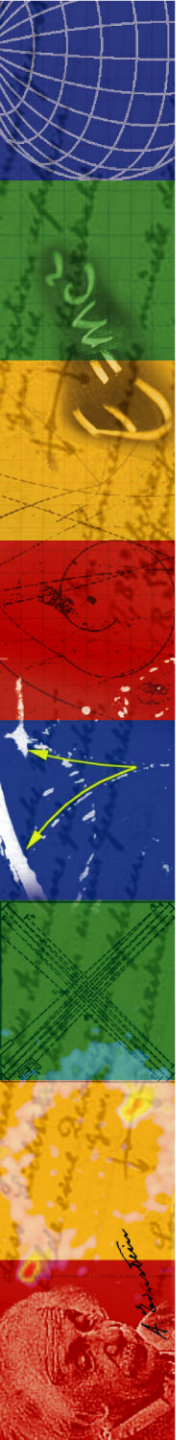
“Spark chamber” example kit available from Portugal, about 10k Euros

Visualizes in real-time the passage of cosmic rays - about 10 per minute



11/26/2009

Dave Barney & Michael Kobel



Over to Michael!