

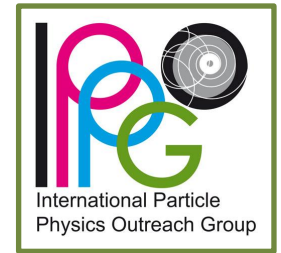


“Discovery Packages”, Nov. 2011, CERN

Dave Barney, Michael Kobel *et al*



# Discovery Packages - Status



- First and foremost “user” of these packages is the News media
  - Other audiences will follow soon after!
- Much of the content production falls on CERN & the experiments
  - Much of which will be at the time of the discovery!
  - But much can also be prepared in advance
- Good deal of initiative taken by US-LHC
- IPPOG’s role has – so far – been limited
  - Working Group formed at IPPOG#1 meeting in Kosice in April 2011
  - Lack of coordination from DB so WG did not meet afterwards! ☹
- But progress has been made towards developing some new materials.....

# “Backgrounders”



- Texts to accompany 8 possible discoveries/major measurements
  - Written by Kathryn Grim and Lauren Rugani (US-LHC)
  - Edited by some IPPOG members
  - Published on CERN and US-LHC web-sites
    - E.g. <http://press.web.cern.ch/press/background/index.html>

## Backgrounders

English version	Other languages
<a href="#">Higgs</a>	<a href="#">FR</a>
• <a href="#">Higgs Limit FAQ</a>	<a href="#">FR</a>
<a href="#">Supersymmetry</a>	<a href="#">FR</a>
<a href="#">Dark matter</a>	<a href="#">FR</a>
<a href="#">Extra dimensions</a>	<a href="#">FR</a>
<a href="#">Matter/antimatter asymmetry</a>	<a href="#">FR</a>
<a href="#">W prime and Z prime</a>	<a href="#">FR</a>
<a href="#">Compositeness</a>	<a href="#">FR</a>
<a href="#">Fourth generation</a>	<a href="#">FR</a>

Watch this space!

# Background Interviews



- Paola Catapano (CERN) & Kathryn Grim (US-LHC) *et al*
  - 2-3 minute video interviews with theorists and leading experimentalists on the eight topics, answering questions such as:
    - *What is this phenomenon?*
    - *How will it be found in <experiment>?*
    - *How will our understanding of the Universe change if you find it? And what will be the next step?*
    - *What happens if you don't find it?*
    - *How will this discovery change everyday life?*
  - Will also make “best of” compilations for each discovery topic
  - Useful background for journalists, but also for teachers, students, public....
  - Aim to have these done and available on the web by the end of 2011
  - May also have some panel discussions etc.

# Background Interviews (cont.)



	English Text	French Text		Theorist Interview	Experiment#1 Interview	Experiment#2 Interview	Compilation
<u>Higgs</u>	<u>OK</u>	<u>OK</u>		<u>J. Ellis (CERN)</u>	F. Gianotti (ATLAS)	G. Tonelli (CMS)	EN FR
Supersymmetry	<u>OK</u>	<u>OK</u>					
Dark Matter	<u>OK</u>	<u>OK</u>					
Extra Dimensions	<u>OK</u>	<u>OK</u>					
Matter/antimatter asymmetry	<u>OK</u>	<u>OK</u>					
W prime and Z prime	<u>OK</u>						
Compositeness							
Fourth Generation	<u>OK</u>						

Draft!

# Animations



- Draft “BBC Interview” text created to understand the need for short animations during a 2-minute news item on the Higgs Discovery <https://cms-docdb.cern.ch/cgi-bin/EPPOGDocDB/ShowDocument?docid=291>
- Most animations will need to be very short (~10 seconds)
  - But longer animations can be used on web-sites, in documentaries, in CERN visits etc.
- Television news (and most other news media) will not create their own animations to describe physics phenomena
- Recently formed a group to storyboard and produce animations (see talk by Rolf)

## BBC News report on Higgs discovery

Scene 1: in the studio, with someone called Natasha (they are all called Natasha)

“Scientists at CERN, the European Laboratory for Particle Physics near Geneva, announced today the discovery of a new particle known as the Higgs boson, sometimes referred-to as the “God particle”. Our science correspondent xxxxxxxx is at CERN.....” (~15 seconds)

Scene 2: science correspondent, probably in CERN

“Thanks Natasha. Indeed just xx months after the start of operations of the Large Hadron Collider here at CERN, scientists from the two big experiments, known as ATLAS and CMS, have announced the first major discovery, that of the Higgs boson.” (~10 seconds)

[cut to a very quick shot of jubilant physicists in a seminar, or something like that] (5 seconds)

[cut to a short animation explaining what the LHC does – collide particles to try to understand more about the universe – with a voice-over] (15 seconds)

“One of the most eagerly awaited results is confirmation of the existence of the so-called Higgs boson, sometimes referred-to as the “God particle” as it is thought to give mass, or “substance” to everything in the Universe. Indeed without this particle the Universe, including the earth and mankind, would not exist at all” (15 seconds)

[cut to animation explaining the Higgs mechanism](15 seconds)

“Collisions between protons occur in the Large Hadron Collider millions of times every second and, on very rare occasions, a Higgs boson may be produced. But the chances of this happening and the experiments finding one is like finding a needle in a million haystacks! And they don't see the Higgs boson directly – they look for telltale signs that it was there, particular patterns in their detector.” (perhaps add an analogy) (~20 seconds)

[cut to a physicist sitting at a terminal showing an event display animation and explaining what happened] (~15 seconds)

“I caught up with the spokespersons of the two experiments to ask what this all means” (~10 seconds)

[cut to a short interview with one (or both) spokesperson(s) saying how excited they are etc.] (20 seconds)

“So what happens now that the Higgs boson has been discovered? Has the LHC finished its job?” (10 seconds)

# Next Steps



- Resurrect IPPOG WG on Discovery Packages!
- Still need to develop an attractive & accessible way to present these “packages” online
- EPPCN and IPPOG should distribute the “backgrounders” texts and translate to other languages
- Video interviews should be done in the coming months
  - Again EPPCN & IPPOG could be involved in translations (dubbing, sub-titling?) and advertising
- Animations are beginning
  - IPPOG are involved in animation strategy & story development
  - EPPCN/IPPOG could be involved in translation/dissemination