INTERNATIONAL MASTERCLASSES HANDS ON PARTICLE PHYSICS

Masterclasses-to-New-Countries

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hands on particle physics

New Countries / Institutes / Groups for IMC18

Confirmed:

Bulgaria: Sofia (CMS)

Qatar: Doha (CMS)

Iran: Tehran (CMS)

Strasbourg: ALICE group

Loose collaborations:

- Physics Without Frontiers
- CERN International Relations Office

Interest expressed:

- India
- Palestine
- Lebanon

Also discussed:

- Hong Kong and Macao
- Mozambique
- Malta
- Korea





Boxes of masterclasses to the world

- Simple measurement. W2D2 for ATLAS and CMS (http://tiny.cc/w2d2-17)
- Use case: onsite (e.g. schools) in developing countries/situations.
 - Some IT
 - No IT
- The Box: what the masterclass leader needs (not physical box!)
- Scenario: IPPOGer or other brings masterclass to new place, e.g. school, in developing situation
- Leave the box with the local educational leaders for later use
- Whenever possible, have teacher workshops to ramp up new leaders

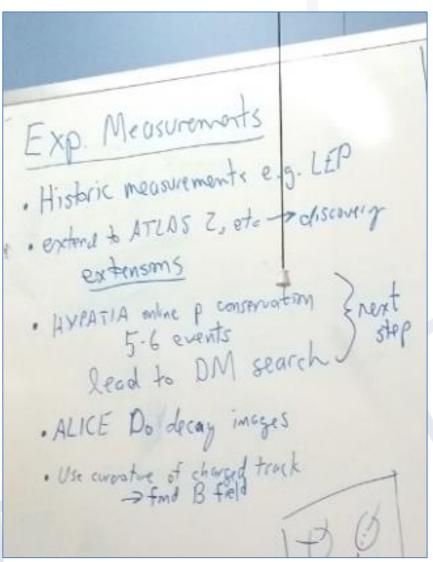




Reports and discussion

Expanding Measurements:

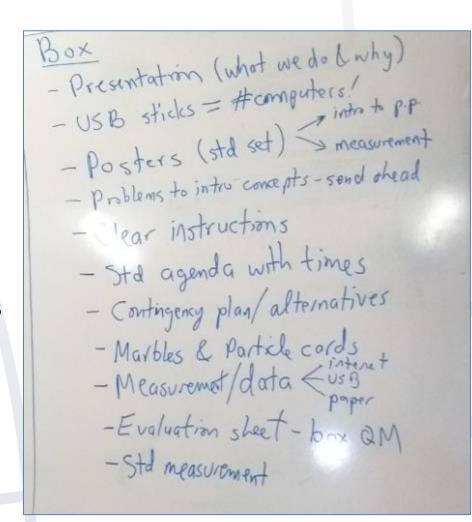
- Historic measurements
 - LEP/Delphi
 - Bubble chamber
- Extensions to existing measurements
 - Look for Higgs signals
 - Conservation of momentum (lead to DM?)
 - Reverse: use p and curvature of charged track to find B-field
- More LHC and other measurements
 - ALICE D-0 decay



Reports and discussion

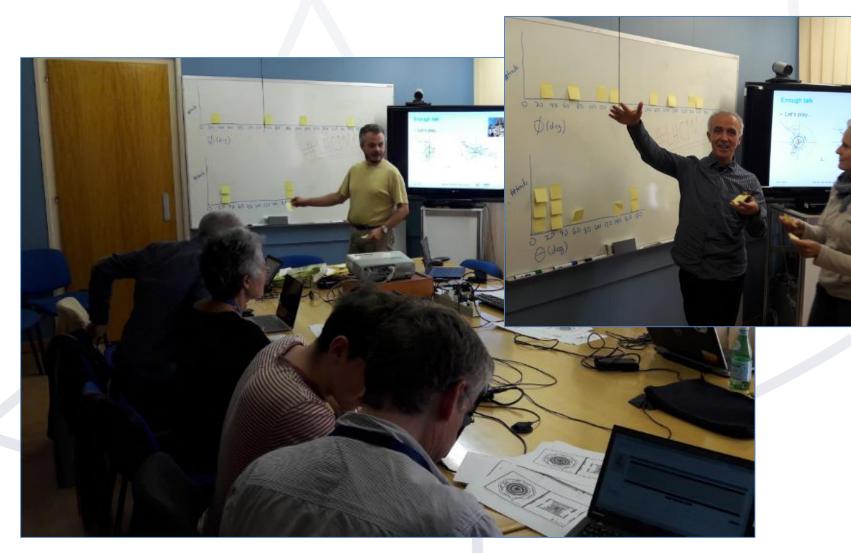
What goes in the box:

- Presentations
 - Intro to PP
 - Intro to measurement
- Intro to concepts
 - Problem sets
 - Actvities (e.g. particle cards)
- Standard agenda/contingency plans
- Measurement data/events
- Evaluation sheet for local teacher
- Official versions of results



10th IPPOG meeting, CERN

Tried measurement out in SG!



IMC2NC-WG, 14th IPPOG Meeting, CERN

