WG5

Recap & Questions for Roadmap

P. Skands, April 17, 2020

Outreach

Education (STEM)

Building the case for accelerator/HEP:

> Industry

> Government

> Other Partners

Outreach (in AUS)

My impression: currently largely driven by individual efforts (some of which are significant!)

Review of current activities for roadmap?

Risks being long list of individual activities?
(If so, maybe that is the point?)

Better format? *(S. Sheehy):* tabular form with a colour-code to easily identify gaps, i.e. audience type, current activities (overview), unmet needs etc…

E.g., systematic input from "professionals" (science communicators, production companies, writers, and orgs who do this for a living)

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Examples of current outreach-related activities

Invitation to self-declare!

- Example from **Melbourne**: S. Sheehy writing popular science book over next 2-3 years, planning associated book tours etc.
- Example from **Monash:** LHC@home / Test4Theory - volunteer computing project for MC generator validation; P. Skands.
- Example from **Adelaide**: P. Jackson member of IPPOG.
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To consider for roadmap/strategy:

- Benefits from improved **coordination** of accelerator/HEP outreach at national level?

- E.g., to enable larger-scale programs, foster nucleation of - and collaboration on - outreach projects, and/or organise regular/recurring events? (cf., eg., IPPOG?)

- Define **strategic aims for outreach**

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STEM education

Crucial to us: defines our intake.

Much larger than just accelerator / HEP.

Not a reason for us to be complacent.

But strategic goals perhaps better phrased and pursued in (much) larger contexts?

- OK, so do we want the roadmap to contain an overview of how we are currently doing that?
- And does it make sense for us to phrase a set of strategic goals for roadmap?

Examples of current STEM-education activities

Invitation to self-declare!

- (Poor) example from **Monash (HEP):** small-scale interactions (occasional presentations, panel judging) with the John Monash science school. (+ input from school/faculty on broader opportunities.)

- …

Building the Case:
Industry, Government, and Other Partners

Main motivation: collect ammunition to help us build our case(s) to funding agencies, government, and other potential partners.

For Example: Leon Lederman to the US Congress, on the cost vs benefit of doing expensive physics research:

Quantum Physics accounts for **⅓ of our GDP**

What do we deliver beyond basic science?
- **Training.**
- **R&D.**
- ⅓ of GDP …

(How) do we demonstrate/substantiate/quantify **value** and **impact** beyond basic science?

WG5 - Towards Potential Roadmap

(Input from S. Sheehy)

Define:

- **What are the aims** of public engagement in this area, including:
    - Which audiences are we reaching (schools, policy makers, businesses, general public etc)
    - + for each audience: *what should be the outcome of engagement with them*
- **What are the *objectives*** i.e. more specific goals in a SMART fashion
    - E.g., *hold 2 industry events attended by at least 10 different companies in the next 24 months*

Specific
Measurable
Achievable
Realistic
Time-Bound

- **What resources** (money, people) **and partnerships** do we need to put in place to make these engagements successful?
    - *E.g. individual academics/institutions have smaller impact than e.g. a proper documentary with global reach…*
- **How to measure** success for each activity/audience type? *i.e. evidence of success will be at least one new academic-industrial collaborative partnership leading to a grant proposal or other output*

Some Overarching Questions:

1. Is there still a need for a separate WG5 or are these aspects largely covered by the other groups?

2. WG5 progress to date: none. Largely due to my inactivity. Need more active leadership if the group is to produce something timely.

3. Requests from roadmap coordinators for concrete deliverables that would be desirable from WG5?

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