



Introduction to Student Projects & Outreach

Markus Elsing (CERN)

Why Outreach training ?

For our field it is important that we **communicate to the general public what** we are doing (and **why** we are doing it) !

- Funding agencies insist on Outreach and many provide dedicated funding
- Outreach as part of your CV is seen as a benefit by many institutes (when hiring)

It is not just for established physicists

- **Students & postdocs** play an important role !



Outreach means a whole range of activities:

- Acting as **guides** to visitors (general public, delegations, VIPs, VVIPs)
- Talking in Outreach **events** (e.g. talks to general public, school kids, etc.)
- **Interviews** with journalists (newspapers, radio, TV, etc.)

Therefore Outreach training is included in lecture programme since **ESHEP2014**

Outreach events at this School:



Tomorrow: **Outreach / Media training**

- Two training sessions (morning and afternoon)
- Evening (optional) one-on-one practice interviews

Sunday (next week): **Student Outreach presentations**

- Evening session with 1 presentation per Discussion Group

Event 1: Outreach / Media training

Trainers:

Chris Jameson and **Tony Prideaux**
from the company “**Inside Edge**”

- Training specialists and contractors with CERN
- Company does general courses and also individual coaching
- Both trainers have a background in **BBC TV** and **radio journalism**
- Needless to say that normally their courses would cost a lot...



3 Dec 2022	
09:00	QCD 3 - Giulia Zanderighi (Max Planck Society (DE)) (0)
10:30	--- Coffee Break ---
11:00	Outreach Training 1 (0)
12:30	--- Lunch + Free Time - ---
15:30	Outreach Training 2 (0)
17:00	--- Coffee Break ---
17:30	Discussion Sessions (until 19:00) (0)
19:00	--- Dinner ---

Part 1 (11h00): **Plenary** session in auditorium

- How to communicate about science to the general public, e.g. interviews with media

Part 2 (15h30): **Parallel** sessions in **2 groups** (Shaked discussion rooms nearby)

- Group 1:
 - ➔ **Practice interviews** and discussion with ~ 3 “volunteers”
 - ➔ Based on "**SUSY scenario**" – **collect handout** now
- Group 2:
 - ➔ Will work with the trainer in the other room
- Swap rooms at about 16h00
- Short **plenary close-out** in auditorium at about 16h30 (15 – 30 mins)

Part 3 (20h00-21h30): Optional

- Optional individual practice interviews and coaching
- We will make **sign-up sheets** with time slots for one-on-one “radio” **interviews**
- This is usually very popular !
- You will be able to get the recording of your own interview after the School

Event 2: Student Outreach Presentations

Each (normal) Discussion Group will prepare **one outreach presentation**

- Each group will be assigned a different "hot" **physics subject**
- Prepare a **7 minutes** presentation at a level suitable for a **general audience**
- You have time until the evening session (after dinner) on **Sunday, December 11**

Be **creative** !

- Imagine you are a science journalist giving a **TV presentation**/report
- Imagine you talk to group of **VIP visitors** coming to CERN
- You can select a **single speaker** or **share** the presentation between two or more people
- You can use graphics material, ...

Share the preparation work !

- Full group should be involved, give **input** and e.g. do **rehearsals** with the presenter(s)
- You can use some time during the **discussion sessions** to get organised, but most of the work will have to happen in your **free time**

On Sunday, December 11, each group will do their presentation in the evening, there will be a **small jury** (!)

- led by **Dana Bernstein**
(Head of Communications at Weizmann Institute of Science)
- Jury will provide **feedback** and determine a **winning** presentation

We will **record** the presentations

- After the session, presenters will be asked for their **permission** to **upload their video** file onto the public **INDICO** web pages
- Material may be used e.g. by our CERN Outreach colleagues to show it to high-school students, and alike...

Judging criteria:

1. **Content:**

the content must be scientifically sound, and well chosen to suit the audience

2. **Clarity:** (critical for effective science communication...)

the structure of the talk is important and the audience (judges) should be able to understand the science content

3. **Connection / inspiration and enthusiasm:**

are the presenters able to project their enthusiasm for their science and is the audience (judges) left "inspired"

Use what you learn tomorrow from the Outreach / Media training !

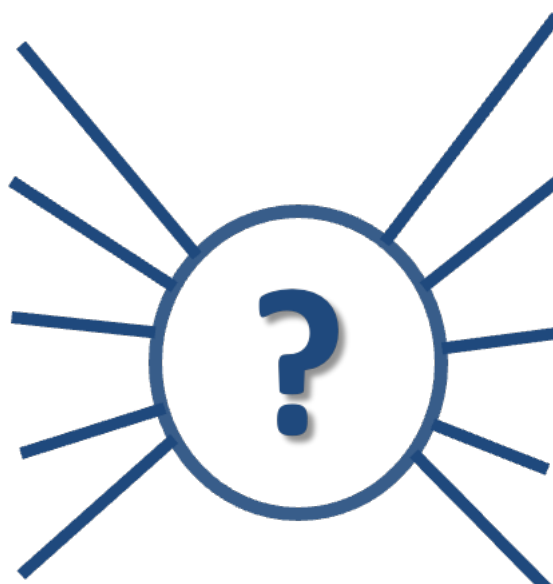
Discussion Group A

Discussion Group B

Discussion Group C

Discussion Group D

Discussion Group E



W mass measurement

First image of Sagittarius A* by the Event Horizon Telescope

Evidence for flavour anomalies in B decays

$H \rightarrow \mu\mu$ and the Higgs mechanism as the origin of fermion masses

muon $g-2$