

Media Training **US/LHC**
 Particle Physics at Discovery's Horizon

Media and Communication Training

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Schedule

- How the media works
- How to work with the media
 - Jargon
 - Key messages
- Interviews
 - Preparing for
 - Being interviewed
 - Following up
- Conclusion and Feedback

Exercise – The first question

- You're being interviewed by a reporter from your local newspaper. She has been assigned to write an article about you and your work, however, she does not usually write about scientific topics. The first question she asks is "What do you do, and why does it matter to me?"
- Write down your response, in no more than 150 words.
- 5 minutes

How the media works



What media want

Media want

- To sell papers/magazines
- To attract listeners/viewers

So stories must

- Appeal to *their* readers/viewers/listeners
- Be entertaining, interesting, newsworthy

What's newsworthy?

Why is this newsworthy?

Fermilab gives final report on hunt for Higgs boson

The call is a cliffhanger.

After two decades of searching, physicists at Fermi National Accelerator Laboratory in Batavia presented their latest and final research Monday on the hunt for the Higgs boson to the wider science community.

They haven't found the particle, but months of scouring the data collected by experiments on the Tevatron collider at Fermilab has all but confirmed their predictions.

Why is this newsworthy?

How will Nobel handle Higgs hassle?

The Higgs boson received nary a mention at this year's Nobel Prize proceedings – and although the Higgs hunt has been the biggest news in physics over the past year, there are good reasons for the silence. Next year, however, the Nobel committee could have a huge Higgs hassle on its hands. And maybe that's a good thing.

What makes a story interesting?

- Impact ➤ End of world
- Immediacy ➤ Nobel prizes
- Proximity ➤ Local scientist helps find Higgs
- Prominence ➤ Tom Hanks, Peter Higgs
- Novelty ➤ Faster-than-light neutrinos
- Conflict ➤ Europe vs. US in Higgs hunt
- Emotions ➤ End of world

Journalists

- Want to be accurate and fair
- Aren't (usually) out to get you
- Will take cues from you
- Are liked by their audience

Publication process (traditional)

- Journalist writes
- Editors edit
- Headline written
- More editing to fit space
- Final product is published (or not!)
- You will rarely get to see the product before publication

Publication process (online)

- Journalist writes
- Journalist (*maybe* an editor) edits
- Journalist writes headline
- Journalist publishes final product
- You will rarely get to see the product before publication

How to work with the media

1. Get on TV/radio, in print
 - Be interested, interesting and *available*
2. Get your message across
 - Prepare, etc. Develop key messages and stick to them

What makes you interesting?

- You are animated and enthusiastic
- You can
 - Describe how your work matters
 - Give clear and concise answers
 - Use analogies and anecdotes
 - Be quotable
 - Avoid jargon

Jargon

“[The Standard Model] foresaw four long-range force particles—referred to as gauge bosons—whereas nature has but one: the photon. The other three have a short range, less than about 10^{-17} meters, less than 1 percent of the proton’s radius. According to Heisenberg’s uncertainty principle, this limited range implies that the force particles must have a mass approaching 100 billion electron volts (GeV).”

- from *Scientific American*

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Jargon strategy 1: Avoid it

- “The diameter of an atom ranges from about 0.1 to 0.5 nanometers.”
- Atoms are so small 20,000,000 just span a pinhead.
- An atom is a million times smaller than the thickest human hair.
- Think supermarket checkout person

Jargon strategy 2: Explain it

- Quarks are some of the building blocks of everything we see around us.
- The Standard Model is the best theory that physicists currently have to describe the building blocks of the universe.
- NAMES are not jargon!

Getting your message across

- Prepare key messages
- And stick to them!

Key message

- 1-2 key ideas
- Start with main point
- Simple language
- Short sentences
- 20-30 seconds to say
- Positive message
- You should be able to talk about it at length

Key message example

Everything we see in the cosmos – stars, planets, people – make up only four percent of the universe. The other 96 percent are made up of mysterious dark matter and dark energy. Particle physics explores this extraordinary 96 percent. We are trying to create and capture particles of dark matter in the laboratory, and are using telescopes to studying the universe around us to learn more about dark energy.

Another key message

Fermilab is the premier particle physics laboratory in the United States. Our powerful beams of particles enable scientists from across the country and around the world to investigate how our universe works at its most fundamental level. Our R&D creates tools and techniques that advance mankind's understanding of the world around us and improves your quality of life.

Exercise – Key Messages

- Read your answer to the journalist's question
- Identify one key message, write it down (60-90 words)
- 5 minutes

When developing your key message, consider:

- What's the one idea you want to convey?
- How do you want to portray yourself, your experiment or your institution?
- If the message were repeated, what would you want to hear?
- Think of the big picture. WHY?

The interview

- Research journalist and outlet
- Ask your own questions
- Prepare key messages, analogies, facts, statistics
- Anticipate questions, especially hard ones
- Do the interview
- Follow up

Questions to ask

- What ground are we covering?
- What kind of clip/message do you want?
- How will it be used? With what other material?
- Will you interview others? Who?
- Where and how will it take place?
- Live or pre-recorded?
- How long?

Answering their questions

- Stick to your key messages
- Be enthusiastic!
- Don't invent
- Don't argue
- Let them interrupt
- Pay attention to repeated questions
- It's their job to fill the space, not yours

Tough questions

- Think of them in advance and prepare
- Answer the question you want to answer
- Always come back with a positive message

TV/Radio top tips

- Keep it short
- Think of it as a social chat
- Pause between sentences
- Maintain your eyeline
- Sit/stand still and lean forward

Pre-recorded interviews:

- No signposting (first, second, third) or "as I said before"
- Can always ask to try again

Phone interview tips

- If you're cold-called
 - Say you're busy and need to call back
 - Determine their deadline
 - Do as much research as you can
- During interview, imagine an authority figure standing behind you

Always remember

- Reporters are human tape recorders.
- Never say anything you don't want to see on air or in print
- Expect editing

It's over

- Give them your card/paper (your name, position, institution, key points)
- Offer to be available for follow-up questions
- Ask for a copy of the final product
- Say thanks!

Exercise: Interviews

Practice!

- Interviewing is a skill like any other
- Work on your key messages
- Note good analogies
- Listen/read about things you don't know anything about. What interests you? What do you remember?
- Ask your (non-physicist) friends/family to interview you

More information

- **Contacts**
 - Fermilab Office of Communication: 630-840-3351, media@fnal.gov
 - Communication Director Katie Yurkewicz (katie@fnal.gov)
 - Media Relations Specialist Andre Salles (asalles@fnal.gov)
 - US LHC Communications: Ashley WengersHerron (ashley@fnal.gov, 630-335-3140)
- **Resources**
 - This presentation and more: www.uslhc.us/mediatraining

1. The first part of the report discusses the background of the project and the objectives of the study. It also outlines the scope of the work and the limitations of the study.

2. The second part of the report describes the methodology used in the study. This includes a detailed description of the data collection methods, the sample size, and the statistical techniques used to analyze the data.

3. The third part of the report presents the results of the study. This includes a summary of the findings, a discussion of the implications of the results, and a comparison of the results with previous research in the field.

4. The final part of the report provides a conclusion and recommendations for future research. This includes a summary of the key findings and a list of suggestions for further investigation.

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