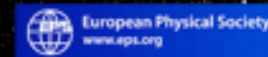


# BEYOND EINSTEIN

## World Wide Webcast

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Multimedia Section  
Communication Group  
**CERN, Geneva**



# BEYOND EINSTEIN

World Wide Webcast

World Wide Webcast from the globe;  
a closing event of WYP 2005

- ◆ Date: **Thursday, December 1, 2005**
- ◆ Time: from **12:00 to 24:00 CET** (guinness record)
- ◆ Four main broadcast platforms so far:
  - CERN, The Science Museum London, Fermilab and The Exploratorium (Tokyo and Australia under discussion)
- ◆ Connections with **HEP labs** and Science Museums around Time Zones
- ◆ **Live Q/A** sessions with remote audience from Science Museums  
(**ECSITE**)

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World Wide Webcast

## Scope

### ◆ Objective

- To celebrate WYP with an the official conclusive event
- Award ceremony for 2005 prizes; SOS 05, AE05, Pirelli Relativity challenge
- Make the public aware of Einstein's physics and yet unsolved mysteries
- To reach out to a world wide audience and media with an unprecedented live event

### ◆ Targets

- young people >14, teachers, general public
- Science Museums ECSITE and schools
- HEP worldwide
- Global Media

# BEYOND EINSTEIN

World Wide Webcast

## Main Themes

- 1 : **2005 WYP** (best of), 2005 Prize awards (Pirelli Relativity Challenge, SOS, AE05..),
- 2. Einstein the man: cities (Bern, Pavia, Milan, Berlin...), descendants (Maric family) ...
- 2: **RELATIVITY**, a different idea of space and time
- 3: **Mass, Gravity**
- 4. **Gravitational Waves**
- 5. **Antimatter**
- 6. The **Big Bang**: after and before
- 6. **Grid Café**

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## Programme

Divided in slots, each devoted to one of the themes, see table (Annex 1) for details. Slot format:

|       |   |
|-------|---|
| 00:00 | Opening + handshake connections                                       |
| 00:05 | Intro local guests  |
| 00:10 | First Clip  |
| 00:15 | THEME: remote connection and theme discussion with guests             |
| 00:30 | ENTERTAINMENT (Sponsors' time)  |
| 00:40 | THEME : Second remote connection and continuation of theme discussion |
| 00:45 | Q&A   |
| 00:55 | Over to next SLOT (gingle)  |

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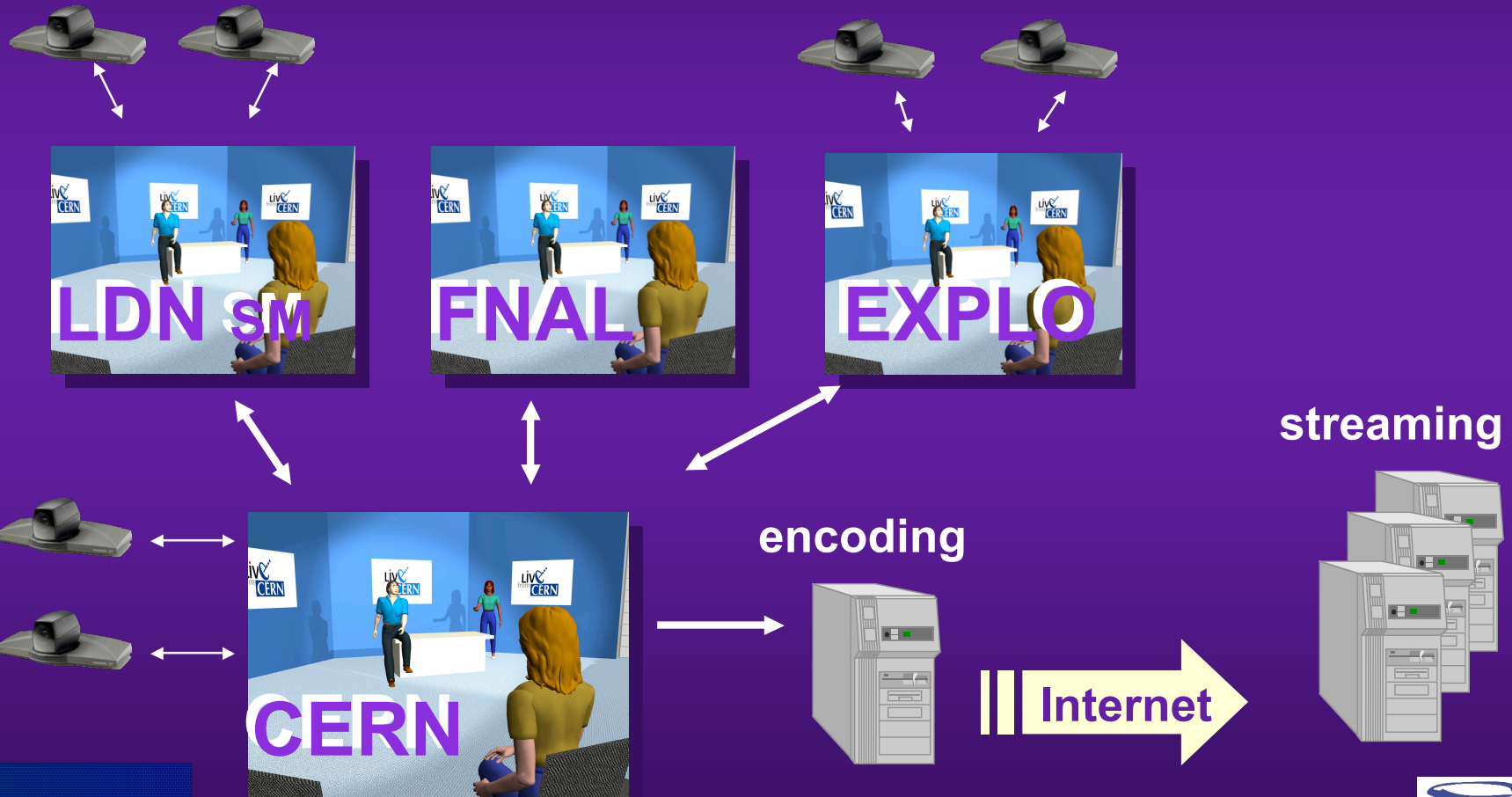
## Partners

|                                   |  |
|-----------------------------------|--|
| Technical (encoding, streaming..) | <ul style="list-style-type: none"><li>- CNAF Bologna (INFN Multimedia)</li><li>- EBU</li><li>- Telecom Italia</li></ul>  |
| HEP                               | Fermilab, Slac, Gran Sasso, EPOG,  |
| Science Museums                   | The Exploratorium, Ecsite, London Science Museum, Dana Centre, Brera Astronomical Museum Milan, Science Museum Kuala Lumpur, Science Museum Jerusalem, Techniquet Cardif, Nemo Amsterdam, Heureka Helsinki, .... |
| Other networks                    | WYP international Steering committee, EPS, Xploranet, UNHCR  |
| Broadcasters                      | RAI, TSI   |
| Commercial                        | Pirelli & Telecom Italia, Grid openlab members, Swiss watchmaker   |

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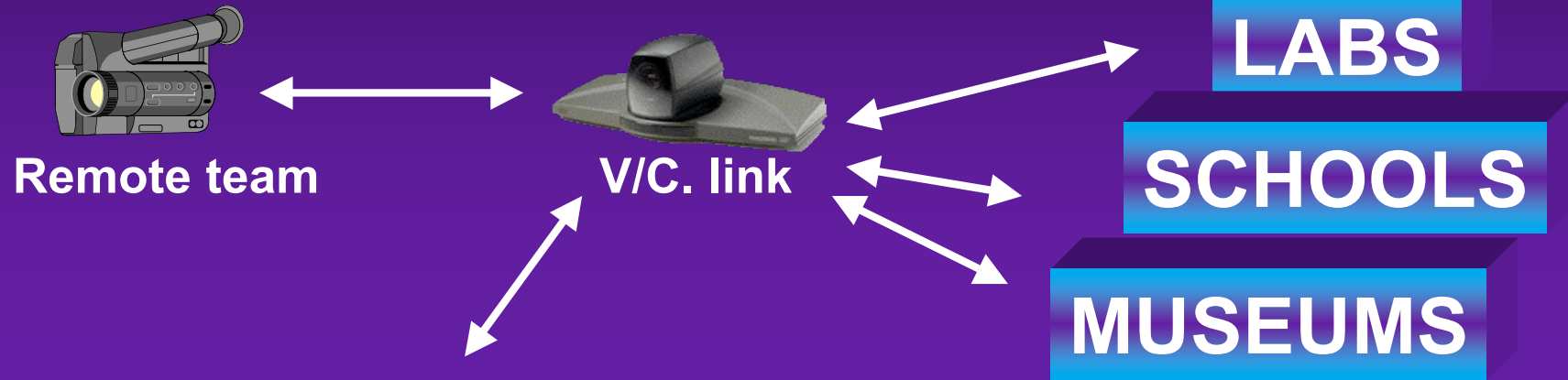
## WWWcast Architecture



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## Webcast Process



encoding

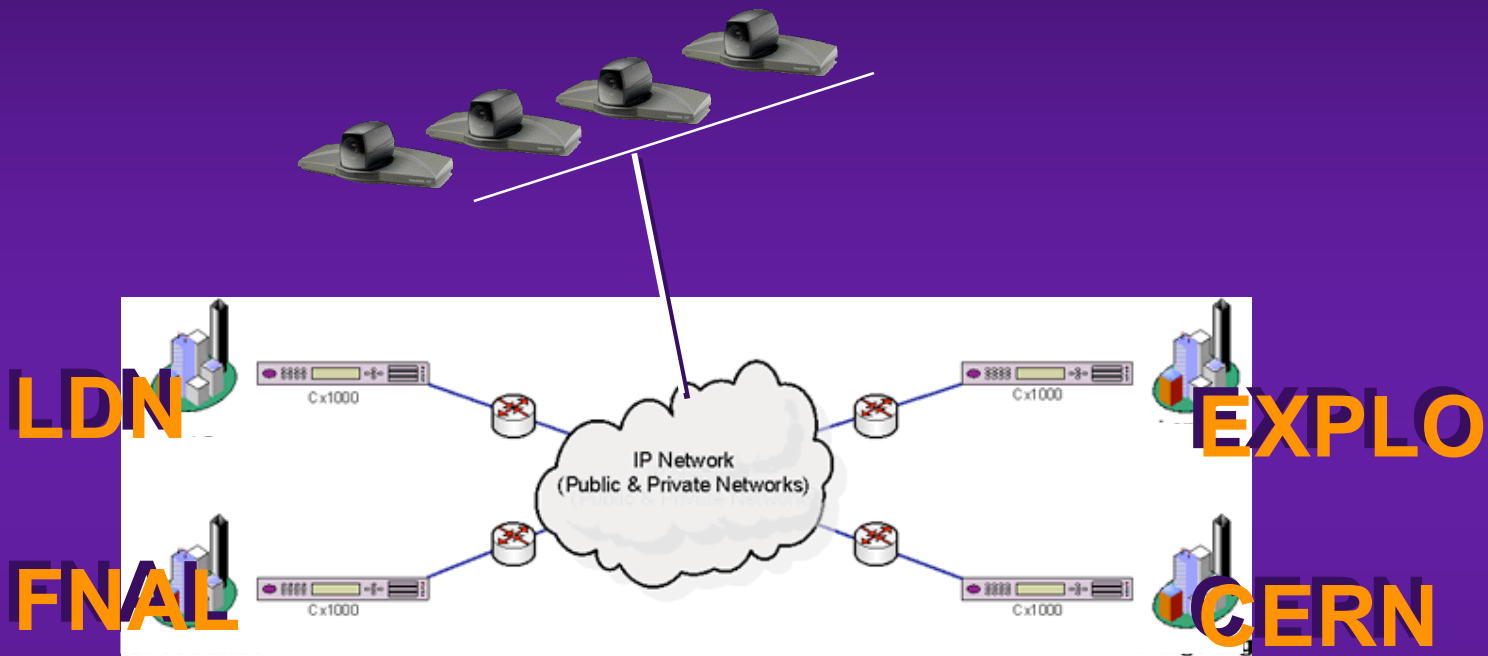




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## Network Architecture



- Broadcast IP boxes (1-3 Mbps, MPEG2/MPEG4) - Ex: Path1
- Private IP carriers w guaranteed bandwidth - EX: Level3, Colt etc.
- Alternative: satellite

# BEYOND EINSTEIN

World Wide Webcast

## Technical requirements

- **Platforms** (CERN, The Exploratorium, The Science Museum, Fermilab, Tokio,...)

will produce their own show

Requirements: local video team and equipment and high-end videoconferencing connection + expert.

- Simple **remote connections** (for Q/A sessions or guests)

need standard videoconference system to get connected to the platform.

- **Encoding, streaming** and platform switching

are catered for by CNAF Bologna (team at CERN) platforms will connect directly to them

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Livefromcern previous productions

[www.cern.ch/livefromcern/](http://www.cern.ch/livefromcern/)

**Antimatter: Mirror of the Universe - Netscape**

live from CERN

## Antimatter : Mirror of the Universe

Discover what antimatter is, where it is made, and how it is already part of our lives.

- Live Webcasts**  
Watch our live webcasts and the archive
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Everything you want to know about antimatter
- The History of Antimatter**  
From the first revolutionary idea to the present days
- The Antimatter Factory**  
CERN's experiments with atoms of antimatter
- Everyday Antimatter**  
Antimatter all around you, in fact and fiction
- Kid's Corner**  
Antimatter for our younger readers
- Questions & Answers**  
CERN physicists answer your questions on antimatter

About this site

This website and the live webcasts are a LIVEfromCERN production from the Education and Technology Transfer Division

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SCIENCE & TECHNOLOGY WEEK

«Everything that can be invented is already invented.»  
Charles H. Duell (Commissioner, U.S. Patent Office, 1900)

life in the Universe

e esa CERN ES O

EUROPEAN SCIENCE TECHNOLOGY WEEK

Special educational events within the European Week of Science and Technology - Enhancing the attraction of basic science, in collaboration with other European Labs

live from CERN

World Physics 2005  
www.physics2005.org

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## How can you get involved?

### How can WYP ISC help

- “Best of” 2005 events video-clips
- Point out events wishing to be connected
- Find Einstein related guests to invite - I.e. descendants
- Point out other Einstein related competition and be present at awards section of Webcast on stage, or connected
- Help with Einstein biography section: contacts with cities where E. lived for remote (live or recorded) connections
- BERN exhibition: short clips about relativity visualized (pre-recorded), to be shown during Webcast



**More info**

**<http://www.cern.ch/wwwwebcast>**