

ECFA

European Committee for Future Accelerators



ECFA Training Panel

Membership

Johann Collot ~~Co-chair, ECFA Detector Panel~~

Erika Garutti Co-chair, ECFA Detector Panel

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Claire Gwenlan ECFA particle physics

Armin Ilg ECFA ECR panel

Paolo Martinengo ECFA particle physics

Elias Metral ECFA accelerators

Ian Shipsey ICFA

Niels van Bakel ECFA particle physics APPEC

Ex-officio

Karl Jakobs ECFA Chair

Patricia Conde Muíño ECFA Scientific Secretary

Roadmap implementation

List of tasks:

- 1) Attract, nurture, recognize and sustain the careers of R&D experts
- 2) Redesign the ECFA web page including a prominent page on training
- 3) Collect and coordinate schools in instrumentation
- 4) Organize an EU master in instrumentation

Task 1) Careers Paths

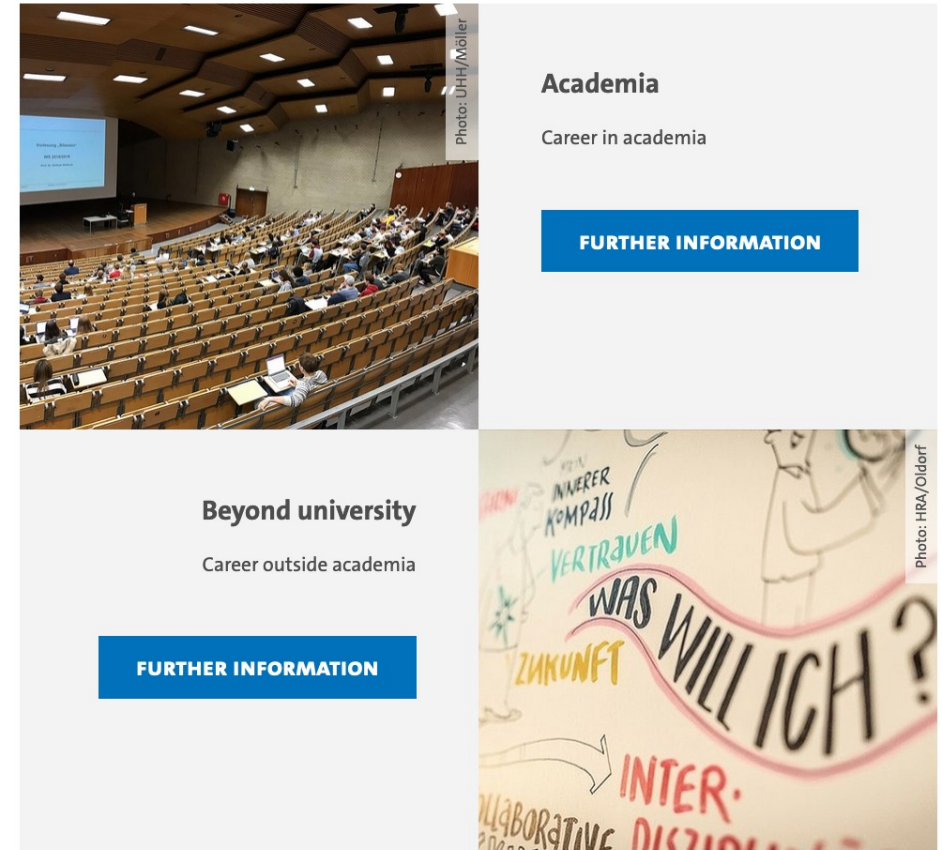
We need candidates to support this activity

- Attract, nurture, recognize and sustain the careers of R&D experts
- Collect Career path options & Testimonial examples in the various countries
- Develop and promote new alternatives

The "postdoc pathways" to professorship
➔ is this all?

Can we propose alternative career paths
for instrumentation experts in academia?

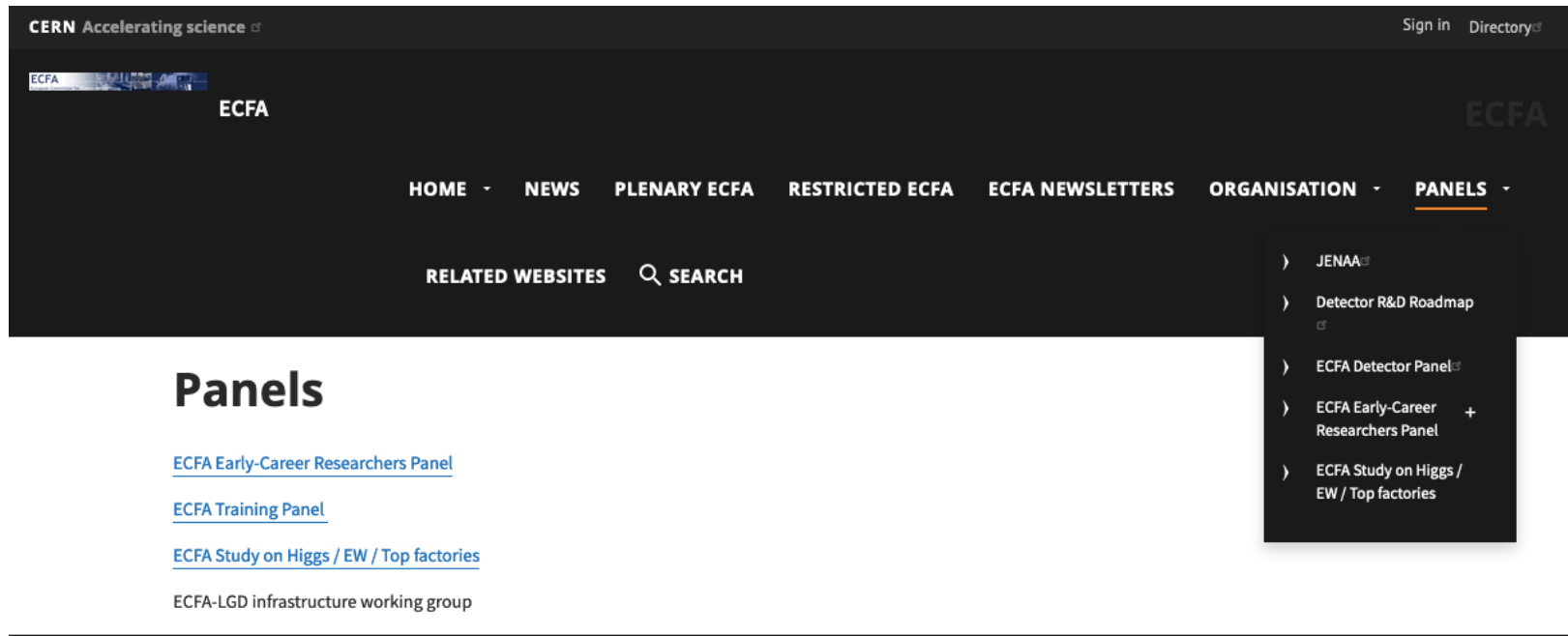
- Work in cooperation with young ECFA



Task 2) Web page

We need candidates to support this activity

- Define the content of the ECFA Training web page

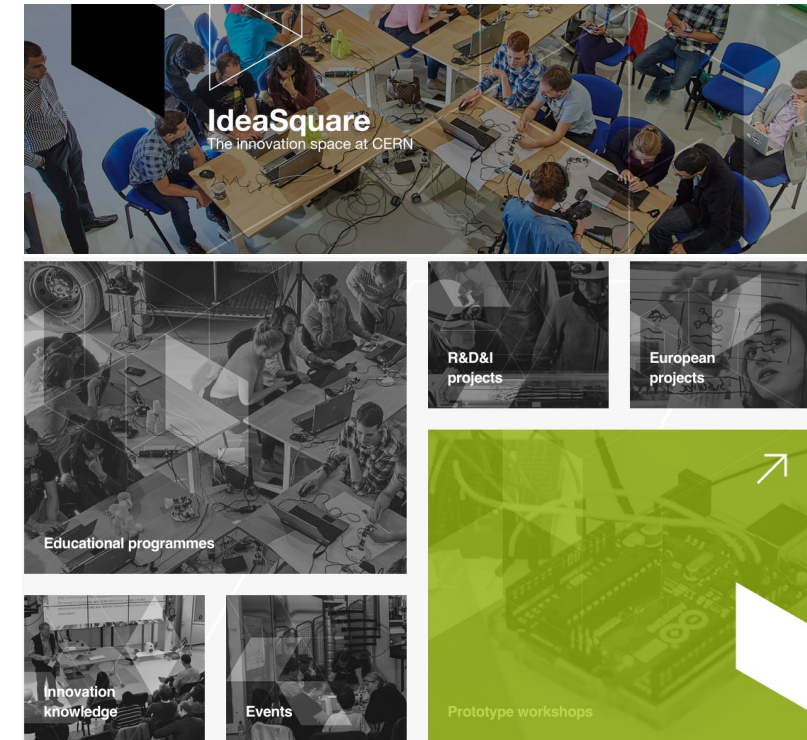


The screenshot displays the ECFA website interface. At the top, the CERN logo and 'Accelerating science' tagline are visible, along with 'Sign in' and 'Directory' links. The main navigation bar includes links for HOME, NEWS, PLENARY ECFA, RESTRICTED ECFA, ECFA NEWSLETTERS, ORGANISATION, and PANELS. Below this, there are links for RELATED WEBSITES and a SEARCH function. The 'Panels' section is highlighted, showing a list of links: ECFA Early-Career Researchers Panel, ECFA Training Panel, ECFA Study on Higgs / EW / Top factories, and ECFA-LGD infrastructure working group. A dropdown menu is open under the 'PANELS' link, listing: JENAA, Detector R&D Roadmap, ECFA Detector Panel, ECFA Early-Career Researchers Panel (marked with a plus sign), and ECFA Study on Higgs / EW / Top factories.

Task 2) Web page

We need candidates to support this activity

- Define the content of the ECFA Training web page
Proposal:
 - List of regular schools / hands-on events in the field of detector & accelerator
 - List of institutes offering a Master in instrumentation or similar
 - Suggested curriculum for a Career in Instrumentation Physics
 - Career path options & Testimonial examples (see task 1)
 - Networking (create a Linked-in group, link to DRD ECR panel activities, ...)
- Define a structure to display the information
 - Split the page for Undergraduate students / PhD / Postdocs / Researchers / Institutes
 - As example: <https://ideasquare.cern/>
- Implement
Patricia Conde Muino (LIP Lisbon) will help with the technical aspects
BUT we need professional support for the implementation



Task 3) collect and coordinate schools

Coordination:
Richard Brenner

WHAT: Aim of ECFA organization

- coordinate the aims, time, offers of the schools proposed on a regular base
- discuss missing activities and needs to develop further hands-on offers
- coordinate access to training: geographical distribution / stipends / diversity
- advertise the schools on the ECFA training web page

All EU
countries
covered?

Stipends for
disadvantaged
students?

Hands-on or
theoretical ?

Specialized
or basic ?

Masters or
Postdocs ?

Particle physics
vs societal
applications ?

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WHY: Added value for school organizers

- network of trainers & list of portable hands-on experiments to be invited at schools
- visibility & recognition at EU level
- broad advertisement on the ECFA web page

EU map of
Instrumentation
training

Who is
teaching what
in one glance

Can we attract
EU stipends?

Find your
school with
one click

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HOW: Instrumentation schools orga meeting

- invite all school organizers for a 2 h meeting (8. April 2024, 15:00-17:00, via zoom)
- collect info from each regular school according to template (see next page)
- action item for needed coordination topics
- prepare overview page: geographical distribution & number of attendees / hands on vs basics / ...

Template for contribution of the Instrumentation schools orga meeting

- Name of the school / organizers
- Main focus (100 words)
- Target group: master students / PhDs / postdocs / researchers
- Frequency / started in ...: yearly since ... / every second year since ... / only in 202X
- Number of participants (average) / geographical distribution in EU [East, Centre, West, non-EU]
- Possibility of stipends (if so, how many and for which target)
- Financing source

Contact person WANTED

- We are collecting a list of contact people to invite to the **Instrumentation schools orga meeting**

List of schools known to us

School name

ISOTDAQ

EURIZON detector school

ICFA School on Instrumentation in Elementary Particle Physics

ESIPAP

INFIERI

EDIT-Excellence in Detector and Instrumentation Technologies

SiRAD

RD51 MPGD School

ISAPP

CRYOCOURSE

EIRO Forum

International SoP "Enrico Fermi"

SENSE Detector School

International School of Nuclear Physics

PRISMA+ School

Seminario Nazionale Rivelatori Innovativi

Please signal more schools &
the name of contact people to:

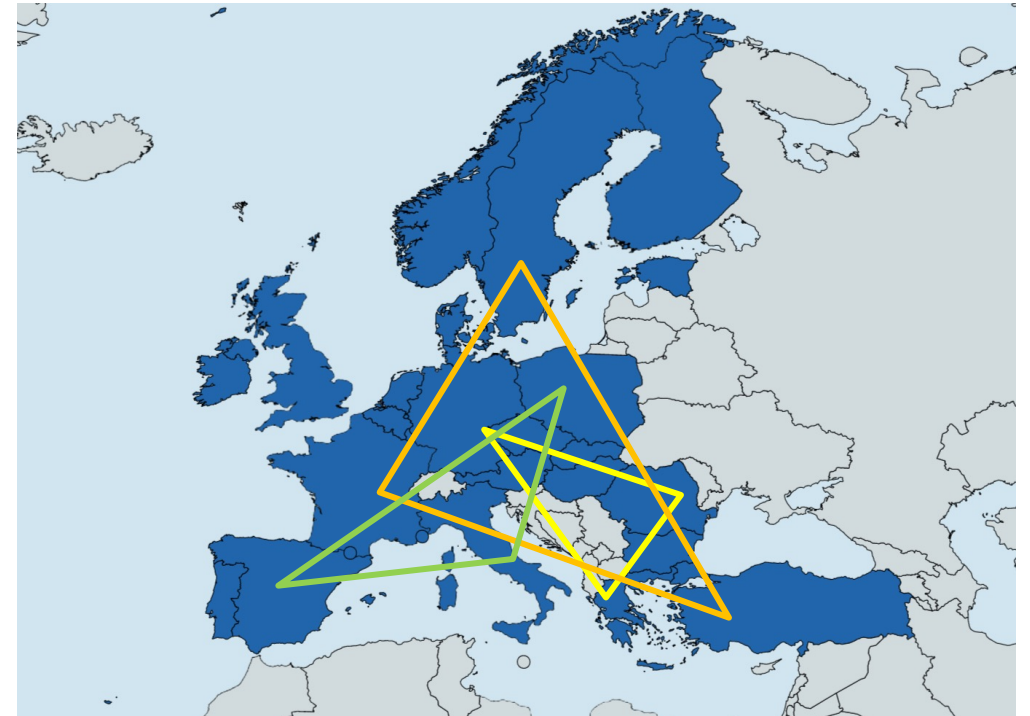
`richard.brenner @ physics.uu.se`

Task 4) EU master in instrumentation

Identify candidates
to **coordinate** the
EU master
preparatory phase

- Prepare a document with a “possible” curriculum in instrumentation to discuss with stockholders who could be interested in contributing
- Idea:
 - trilateral-master program (similar to Erasmus-mundi)
 - Bring together institutes with large infrastructures & “less privileged” universities with strong experimental competences
- Collect examples & experiences
 - International Master Advanced Methods in Particle Physics, Universities of Dortmund, Bologna, University of Clermont Auvergne (Kevin Kroeninger), since 2021
 - European Master in particle Physics and Accelerator Technologies for Research and Industry, Baltic states (Kārlis Dreimanis), in preparation

EU Master in Instrumentation



Exemplary graph only / no real connections

THANK YOU FOR YOUR ATTENTION

Please contact me for:

- Questions
- Suggestions
- **Volunteering !!!!**

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