



This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under GA No 101004730.

Welcome to EAAC 2023

Ralph Assmann (GSI, *DESY until 31.8.2023*)
Massimo Ferrario (INFN)

18.9.2023





This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under GA No 101004730.

IFAST = Innovation Fostering in Accelerator Science and Technology

EU Project May 2021 – April 2025, Coordinator M. Vretenar

WP6: Novel Particle Accelerators Concepts and Technologies

Contains European Network for Novel Accelerators (EuroNNAc4) = Sponsor of EAAC



Tasks of WP6 – Novel Particle Accelerators Concepts and Technologies

- Task 1 (RA + M. Ferrario): **Novel Particle Accelerators Concepts and Technologies** (NPACT – EuroNNAc4) M1 – M48
*Sub-task leaders: **B. Holzer** (CERN), **D. Minenna** (CEA), **A. Specka** (CNRS), **R. Walczak** (Oxford)*
 - **Many thanks to Phi Nghiem from CEA who retired since the EAAC21!**
 - **Welcome to Damien Minenna from CEA!**
- Task 2 (Leo Gizzi): **Lasers for Plasma Acceleration** (LASPLA) M1 – M48
- Task 3 (Cedric Thauray): **Multi-scale Innovative targets for laser-plasma accelerators** (MILPAT) M1 – M32
- Task 4 (Francois Mathieu): **Laser focal Spot Stabilization Systems** (L3S) M1 – M36

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THANKS to Rasmus Ischebeck from PSI for acting as co-editor of EAAC 2023 proceedings with Damien!

EAAC is an iFAST/EuroNNAc Deliverable

Deliverables related to WP6

D6.1: EAAC workshops and strategies.

Report on the EAAC workshops as strategic forums for international accelerator R&D and resulting strategies

M42

D6.2: LASPLA Strategy.

Report on a strategy for laser drivers for plasma accelerators.

M46

D6.2: Electron acceleration experiments with new targets.

Report on electron acceleration with micro-scale target at a kHz repetition rate, and with long targets at the multi-Joule level.

M24

D6.4: Improvement of the laser intensity stability on target.

Report showing the stability on two laser facilities before and after improvement.

M36

We provide **funding to the EAAC** workshop, in particular rooms, proceedings, student grants, van der Meer prize award, ... (**about 350,000 €** since 2013, the first EAAC)

PLEASE acknowledge EU funding support on posters, papers, ... (see acknowledgement on my title slide)

Changes for EAAC Ahead

- EAAC 2023 is the **last EAAC that is sponsored by EuroNNAc/iFAST**, which will end its project lifespan by Spring 2025.
- So far we financed the European Network for Novel Accelerators (EuroNNAc) through the CERN coordinated EuCARD, EuCARD2, ARIES, iFAST projects with EU funding
- EuroNNAc future beyond 2025 to be defined (founded in 2011 at CERN by RA), including **EU sponsoring for EAAC → EAAC 2025** !?
- RA left DESY end of August 23, now in charge of GSI „Accelerator Operation and Development“ area. Focus work back on RF accelerator infrastructure, possibly staying connected through Frankfurt Goethe University research group.

Outlook to AAC 2024

Please
save the
date!



AAC'24 ADVANCED ACCELERATOR CONCEPTS
A Chicagoland meeting of the global Advanced Accelerator Concepts community

AAC'24 Advanced Accelerator Concepts Workshop

Jul 21 – 26, 2024
NIU Naperville Conference Center
US/Central timezone

- Overview
- IMPORTANT DATES**
- Call for Abstracts
- Registration
- Participant List
- Accommodations

The AAC'24 workshop is a biennial forum for intensive discussions on long-term research in advanced accelerator physics and technology. This research supports the development of capabilities for the basic sciences, from photon science to high energy physics, as well as the development of compact accelerators for industrial, medical and security applications.

Starts Jul 21, 2024, 8:30 AM
Ends Jul 26, 2024, 6:00 PM
US/Central

NIU Naperville Conference Center
1120 E. Diehl Road, Ste 150, Naperville IL 60563

Support
nrezek@anl.gov

John Power
Jonathan Jarvis

<https://indico.fnal.gov/event/59618/>





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EAAC 2023 → Back at Elba, fully in person!

Remember 2021...



EAAC

Workshop

2021

Hybrid

European

Advanced

Accelerator

Concepts

Workshop

5th Edition



5th European Advanced Accelerator Concepts Workshop

20–23 Sep 2021
INFN LNF
Europe/Rome timezone

Enter your search term



Overview

Committees

Timetable

Scientific Program - Indico
Style

My Conference

My Contributions

5th EAAC - Group photo

Participant List

INFN Privacy Policy

WIFI Internet Access

How to get LNF and
general info

Previous Editions

Support

✉ eaac2021@lists.lnf.infn.it

5th European Advanced Accelerator Concepts Workshop

REGISTRATION IS CLOSED

The workshop will take place at LNF-INFN from the 20th to the 22nd of September 2021 in a hybrid format, followed by a EuroNNAC meeting on the 23rd of September.

Under present rules most of the workshop will take place in a virtual and reduced format, allowing an expectation of maximum of **40 people** to attend in-person at the LNF-INFN, in Frascati (Rome, Italy).

For those participants who will be notified as "in presence", it will be requested to show EU covid-19 green pass or covid-19 certificate at the entrance of the LNF area and/or Bruno Touschek Auditorium due to the new Italian law issued on July 22, 2021. Here some useful information about travelling to Italy: [link](#).

LNF-INFN decline all responsibility for any quarantines/isolations that may occur in the event of a positive COVID-19 case during the meeting.

The focus this year will be on 18 plenary talks and a one day event on the accelerator R&D roadmap discussions ongoing in Europe and the US.

The poster session and the usual parallel sessions of working groups cannot take place.

The **European Advanced Accelerator Concepts Workshop (EAAC2021)** has the mission to discuss and foster methods of beam acceleration with gradients beyond state of the art in operational

EAAC

Workshop

2021 Hybrid

European
Advanced
Accelerator
Concepts
Workshop
5th Edition



5th European Advanced Accelerator Concepts Workshop 20 Sep - 23 Sep

Created by Maria Rita Ferrazza (maria.rita.ferrazza@infn.it) from event on 15 Sep 2019

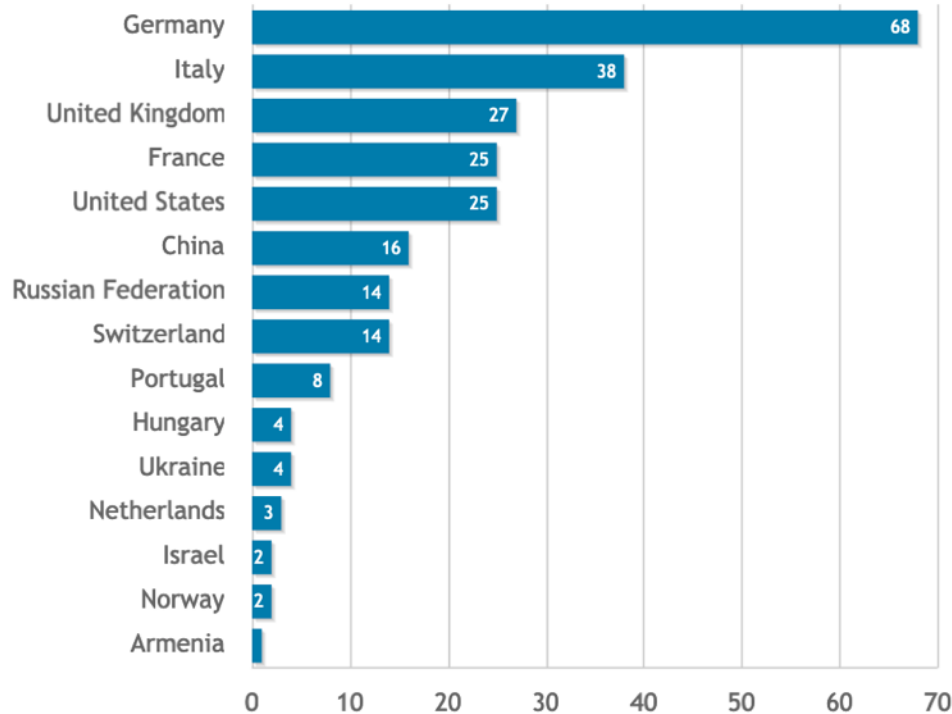
Registration

Stats for "5th EAAC21 Pre-registration form"

Overview



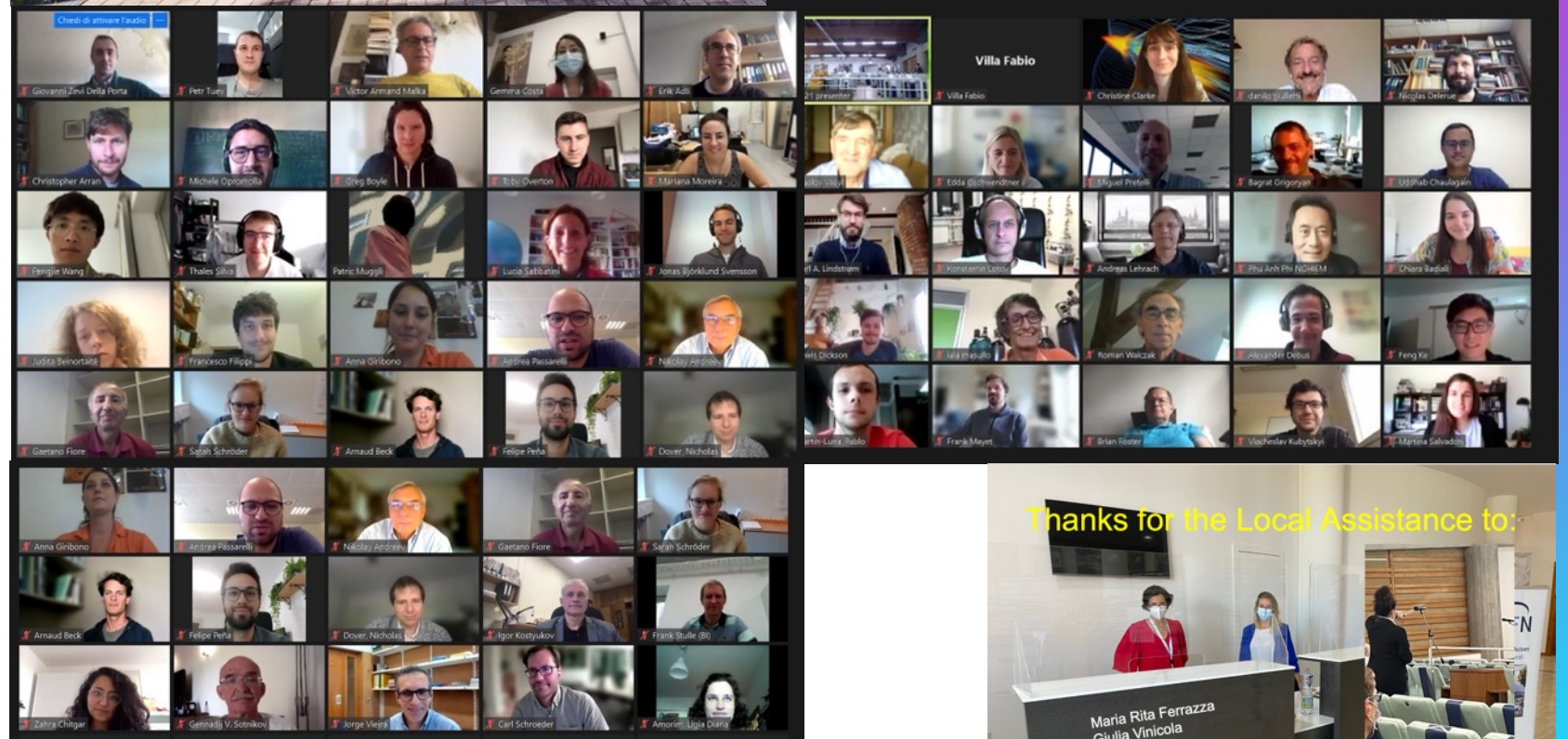
Registrants per country



EAAC Workshop

2021 Hybrid

European
Advanced
Accelerator
Concepts
Workshop
5th Edition



R. Assmann & M. Ferrario – iFAST WP6 – Opening of EAAC 2023

EAAC

Workshop

2021 *Hybrid*

European
Advanced
Accelerator
Concepts
Workshop
5th Edition



6th European Advanced Accelerator Concepts workshop

17.–23. Sept. 2023

Hotel Hermitage, La Biodola Bay, Isola d'Elba, Italy

Europe/Rome Zeitzone

Geben Sie Ihren Suchbegriff ein 

Übersicht

Tagesordnung

PRELIMINARY COMPACT
AGENDA

Buch der Abstracts

Registration Information

Steering Committee
Agenda

Grants for Students -
General information and
Poster Sessions

Committees

Working Groups

Sponsors

The **European Advanced Accelerator Concepts Workshop** has the mission to discuss and foster methods of beam acceleration with gradients beyond state of the art in operational facilities. The most cost effective and compact methods for generating high energy particle beams shall be reviewed and assessed. This includes diagnostics methods, timing technology, special needs for injectors, beam matching, beam dynamics with advanced accelerators and development of adequate simulations.



EuroNNAc → International Advisory Committee IAC for EAAC23

EUROPEAN NETWORK FOR NOVEL ACCELERATORS
EuroNNAc₃
supported by EU via ARIES

Armenia
CANDLE

China
Beijing National Laboratory IOP CAS
IOP, Chinese Academy of Science
Shanghai Jiao Tong University
Tsinghua University

Czech Republic
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ENSTA Paris tech
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LPGP
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Soleil

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Gesellschaft für Schwerionenforschung (GSI)
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Max-Planck-Institute for Physics
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RIKEN Spring-8

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Institute of Applied Physics RAS

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Switzerland
University of Bern
Paul Scherrer Institut

UK
ASTeC
Cockcroft Institute
JAI - Imperial College
Lancaster University
Manchester University
Oxford University
Queen's University of Belfast
STFC Rutherford Appleton Laboratory
STFC Daresbury Laboratory
University College London
University of Liverpool
University of Strathclyde

USA
Brookhaven National Laboratory
Fermi National Accelerator Laboratory
Lawrence Berkely National Laboratory
Lawrence Livermore National Laboratory
SLAC National Accelerator Laboratory
University of California Los Angeles

International
European Organization for Nuclear Research (CERN)
ELI Beamlines
International Committee for Future Accelerators
International Committee on Ultra High Intensity Lasers





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10 Years EAAC → Forza EAAC 2023!

→ **Warm welcome on behalf of the organizers, the EuroNNAc network and the iFAST management!**

→ **Enjoy EAAC 2023!**





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Great applause for Enrica Chiadroni



**The outstanding program
committee chair of this EAAC**

and chair of first session...

