



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

Yearly Meeting 2022

24 September 2022, Elba, Italy

Ralph Assmann, DESY & LNF/INFN

Massimo Ferrario, LNF/INFN



Proposed Agenda

- Agenda
- Goals, milestones & deliverables of I-FAST WP6 Task 1 (NPACT/EuroNNAc)
- Review NPACT/EuroNNAc Special Topic Meeting 2022
- EAAC 2023
- New Initiatives proposed
- AOB (roundtable)

Approved?

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WP6 Milestones

NOW

May 2023

- MS21: Report on the novel accelerator landscape in Europe, facilities, projects and capabilities at the beginning of the 2020's. Lead – DESY, M24, Publication, website (task 6.1)
- MS22: LASPLA Workshop/School. Lead – CNR, M30, Report (task 6.2)
- MS23 Target manufacturing and characterization. Lead – CNRS, M12 Report (task 6.3)
- MS24: Hypothesis on the causes of the instabilities of the focal spot profile. Lead – CNRS, M24 Publication (task 6.4)

This Special Topics workshop will **prepare the milestone MS21**.
Thanks to all **session organizers** and **participants** for your help!

Producing the MS21 Report

- ST co-coordinators prepare a **1.5 – 2 page** (can be more) written summary for topic:
 - NO template required, any format fine.
 - Text required, readable to EU level reviewers. References to talks and papers OK.
 - 1 Figure plus 1 Table per 2 pages max.
 - ST co-coordinators distribute to all participants for comments.
- Major questions to address for each special topic:
 - What are **facilities** available and presented?
 - What are the major **projects** presented and discussed?
 - What are our **capabilities** – covering what we need or something mentioned as missing?
 - What are the next steps listed and what is the outlook into the future?
 - Any **important message** we want to pass to I-FAST and EU for the specific special topic?
- Proposed deadline for sending to RA & MF: **1 Nov 2022** (easier close to WS)
- We will assemble it and iterate the report with WS participants.

WP6 Deliverables

Later (after
EAAC 2023)

Nov 2024

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

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18:00

Summary - Beam-driven Plasma Accelerators with focus on proton-driven

Edda Gschwendtner et al.



Sala Maria Luisa - Hotel Hermitage

18:00 - 18:07

Summary - Simulation tools and roadmap

Jorge Vieira et al.



Sala Maria Luisa - Hotel Hermitage

18:07 - 18:14

Summary - Laser Technology and LWFA Results (e-, p+, ion)

Leonida Antonio Gizzi et al.



Sala Maria Luisa - Hotel Hermitage

18:14 - 18:21

Summary - Distributed Plasma Accelerator Landscape in Europe and Technical Progress towards Applications (EuPRA)



Enrica Chiadroni et al.

Summary - Talks and discussion on plasma-based FEL experiments

Arie Irman



Sala Maria Luisa - Hotel Hermitage

18:28 - 18:35

Summary - Particle physics plasma test facility (multi-stage, 10`s of GeV)

Carl Schroeder



Sala Maria Luisa - Hotel Hermitage

18:35 - 18:42

Summary - EuroNNAc Student and Young Researcher Program - Posters, prizes, ...

Bernhard Holzer et al.



Sala Maria Luisa - Hotel Hermitage

18:42 - 18:49

Summary - International Landscape: Facilities, projects, initiatives

Mark Hogan et al.

Sala Maria Luisa - Hotel Hermitage

18:49 - 18:56

19:00

Summary - Structure-based accelerators (e.g. ACHIP) and advanced radiation generation schemes

Rasmus Ischebeck



Sala Maria Luisa - Hotel Hermitage

18:56 - 19:03

Review NPACT/EuroNNAc Special Topic Meeting 2022

- Special topics covered: Any ST missed?
- Format: Plenary only versus plenary + parallel
- Poster sessions
- Student involvement
- Student Grants (42 full cost grants)
- Organization: Hotels, Breakfast, Coffee breaks, Lunch, Dinner, Social Evening, ...
- Registration fee
- Number of participants: 148 (including students)

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EAAC 2023

- Location: Elba (proposed)
- Dates: 17-23 September 2023 (proposed)
- Topics & format: return to 2019 format?
- Max # participants: 150 or **270** or ?
- AOB EAAC 2023

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New Initiatives proposed

- Senior EuroNNAc Prize
 - Proposed to be named after Robert H. Siemann
 - for senior candidates (> 10 years after PhD?)
 - No age restriction
 - No restriction on nationality or employment (within bounds of EU regulations, e.g. respecting sanctions – require dedication to peaceful collaborations and goals)
 - Can be awarded to active or retired persons
 - ...
- Other new initiatives?

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EUROPEAN NETWORK FOR NOVEL ACCELERATORS

EuroNNAc₄

NPACT supported by EU via I-FAST



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