



WP2.2 news

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24th October 2023



Tracking WP2.2 activities

- ⇒ Tracking of WP2.2 will happen in [this document](#). The document can be edited freely so you can update information. (Just the summary sheet is protected)
- ⇒ It contains also a list of conference opportunities (see next slide)
 - ✓ You are welcome to add in new conferences.

	A	B	C	D	E	F	G
1	Conference	Dates	Venue	Website	comments		
2	IML2024	29/1/2024 - 2/2/2024	CERN	https://indico.cern.ch/event/30272/	Call for abstracts closes on Nov 15th 2023		
3	AISSAI2024	4-7/3 2024	Clermont-Ferrand	https://indico.in2p3.fr/event/30272/			
4	EuCAIFCon	30/4-3/5/2025	Amsterdam	https://www.eucaif.org/			
5	LHCP2024	3-7/6/2024	Boston	https://indico.cern.ch/event/1253590/			
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Conference Opportunities ▾

Conferences ▾

Publications ▾

Summary ▾



Upcoming conferences

- ⇒ 2023 November LHCC meeting, student poster session.
- ⇒ 29 January 2024 to 2 February 2024, CERN, 6th Inter-experiment Machine Learning Workshop <https://indico.cern.ch/event/1297159/>
- ⇒ 4–7 Mar 2024, Clermont-Ferrand, AISSAI Anomaly Detection Workshop, <https://indico.in2p3.fr/event/30272/>
- ⇒ 30 April - 3 May 2024, Amsterdam, European AI for Fundamental Physics Conference <https://www.eucaif.org/>
- ⇒ 3–8 Jun 2024, Boston, USA, 12th Edition of the Large Hadron Collider Physics Conference <https://indico.cern.ch/event/1253590/>
- ⇒ **Please consider them for abstract submissions!**



Upcoming events

- ⇒ Training opportunity on Leonardo, Oct 27th:
<https://eventi.cineca.it/en/hpc/introduction-leonardo-hpc-cluster-users-and-developers/bologna-20231027>
- ⇒ Hep Software Foundation (“ATLAS”) GPU tutorial Oct 31st-Nov 2nd:
<https://indico.cern.ch/event/1331139/>
- ⇒ CERN launches its Open Source Program Office (OSPO) on Nov 28th and 29th.



Agenda for today

14:00 → 14:10 **News**

🕒 10m



Speakers: Alberto Annovi (Istituto Nazionale di Fisica Nucleare), Piergiulio Lenzi (Istituto Nazionale di Fisica Nucleare)

14:10 → 15:10 **Ultrafast simulations**

Convener: Lucio Anderlini (Istituto Nazionale di Fisica Nucleare)

14:10

Flash simulation and Advanced Machine Learning: Status report

🕒 20m



Speaker: Lucio Anderlini (Istituto Nazionale di Fisica Nucleare)

14:40

Quality control (QC) of primary vertices based on reconstruction properties with ML

🕒 20m



Speakers: Mattia Faggin, Mattia Faggin (Istituto Nazionale di Fisica Nucleare), Mattia Faggin (Università di Padova)

15:10 → 16:00 **Development of ultra-fast algorithms running of FPGAs**

Conveners: Bernardino Spisso (Istituto Nazionale di Fisica Nucleare), Simone Gennai (Istituto Nazionale di Fisica Nucleare)

15:10

Status report

🕒 20m



Speakers: Bernardino Spisso (Istituto Nazionale di Fisica Nucleare), Simone Gennai (Istituto Nazionale di Fisica Nucleare)

15:40

Bond machine status and plans

🕒 20m



Speakers: Giulio Bianchini (Istituto Nazionale di Fisica Nucleare), Mirko Mariotti (Istituto Nazionale di Fisica Nucleare)



Backup



Flagship use cases

Flagship documents available at these links:

- ⇒ **Quasi interactive analysis of big data with high throughput**
 - ✓ Tommaso Diotallevi (UniBo), Francesco Gravili (UniSalento)
- ⇒ **Advanced ML: flash simulation and other bleeding edge applications**
 - ✓ Lucio Anderlini (INFN Fi)
- ⇒ **Development of ultra-fast algorithms running of FPGAs**
 - ✓ Bernardino Spisso (UniNa), Simone Gennai (INFN MiB)
- ⇒ **Porting of algorithms to GPUs**
 - ✓ Adriano Di Florio (Poliba)
- ⇒ **Physics validation of reconstruction code on ARM**
 - ✓ Francesco Noferini (INFN Bo)

Thanks to the work of the PIs over the summer and to all of your contributions



Flagship UC mailing lists

- ⇒ Quasi interactive analysis of big data with high throughput
 - ✓ [\[cn1-spoke2-wp2-analysisfacility\]](#), [subscribe](#)
- ⇒ Advanced ML: flash simulation and other bleeding edge applications
 - ✓ [\[cn1-spoke2-wp2-flashsim\]](#), [subscribe](#)
- ⇒ Development of ultrafast algorithms running on FPGAs
 - ✓ [\[cn1-spoke2-wp2-fpga\]](#), [subscribe](#)

Please subscribe to the list that is relevant for the work you are doing in ICSC.



ICSC spoke 2 github organization

Available at: <https://github.com/ICSC-Spoke2-repo>

People are encouraged to add repositories with software developed in the context of ICSC - spoke 2. Send us a request for the creation of repos/moving of repos

Important: if you are not the owner of a repository (e.g. because it is the repository of an experiment and it contains code other than the one developed in the context of ICSC), we'd still be interested in forking the repo in this organization

Having spoke 2 code in this organization is important for reporting/auditing from the referees