

Minutes for WP 5.3 Machine learning: ML optimizer toolkit



Bi-weekly meeting, Monday at 16:00

Datum: 16.02.2023

Participants: Sabrina Appel, Verena Kain, Sebastian Rothe, Max Schütt, Nico Madysa

<https://web.infn.it/EURO-LABS/>

Zoom-Link: <https://cern.zoom.us/j/2175516459?pwd=UDVuSWw5Sm40Wjl5Rm9GeWZ3c2dldz09>

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<p>1. General points S. Appel will be set-up a Mail-list, Outlook-Initiation, Indico-page at the GSI infrastructure and provide the minutes. The meeting will be bi-weekly and cancel if nothing is to be discussed.</p>	S. Appel
<p>2. Milestones and Deliverable The Milestone MS37 “The source code of the ML toolkit prototype is available on a shared platform” must be delivered at 30 Apr 2023. A lot of preparation has already been done and timely delivery is possible, see for more details at Topic 3. The Draft Report has been sent to S. Appel.</p>	V. Kain, S. Appel
<p>3. Development and activities of ML optimizer toolkit</p> <ol style="list-style-type: none"> a. GeOFF: The graphical application for generic numerical optimization and reinforcement learning on CERN accelerators is already available at CERN gitlab (https://gitlab.cern.ch/be-op-ml-optimization/acc-app-optimisation). GeOFF includes still some CERN Libraries like pjsa. b. A GUI-free version is under development and next week a coding session is planned to release the first beta version. 	V. Kain, N. Madysa
<p>4. Development and activities of ML methods</p> <ol style="list-style-type: none"> a. Testing and Experiments at Isolde-Offline April the demand of other users is low and regular test like on shift per week are possible. 	S. Rothe S. Appel

b. Including COSY activities into Euro-labs

S. Appel suggest to include the COSY activates into EURO-Labs, as COSY accelerator belongs since this year to GSI. Awal Awal is developing ML for beam line optimization including the magnets as optimization parameters. He is looking for beam time at CERN.