## 13th MT ARD ST3 Meeting 2025 bei DESY in Zeuthen



Contribution ID: 45 Type: Talk

## Automation & optimization with classical optimizer towards RL at GSI with Geoff

Thursday 26 June 2025 15:00 (20 minutes)

Automation & Optimization with Classical Optimizer towards RL at GSI with Geoff

Geoff is an open-source optimization framework developed at CERN and further maintained in collaboration with GSI as part of the EURO-LABS project. It provides a standardized interface to optimization problems, enabling seamless switching between classical optimizers and reinforcement learning approaches. In addition, utility functions and tools within Geoff help accelerate the development of optimization workflows. Using the example of beam injection into SIS18 at GSI, we illustrate how optimization can evolve from classical optimizer to reinforcement learning.

## **Summary**

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Session Classification: Beam Control