

Machine-Learning Applications at CRYRING@ESR – ☒ Experiences and Ideas

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CRYRING@ESR is a low-energy ion storage ring and Swedish in-kind contribution to FAIR. It is operational since 2019 serving atomic, nuclear and material physics experiments. Besides this purpose, it serves as a test bench for new FAIR concepts such as novel detectors and control system features. In this context, the “device-automator” application provides an end-user application for implementing various optimizers, in particular a genetic optimizer. It is integrated into the FAIR Control System stack and available for operating in the FAIR CS launcher. We will report on the experiences made using genetics optimization, challenges and future prospects.

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