Accelerator ML Living Review

Summary Statistics

per_year: 1
per_category: 5
per_venue/journal: 1
per_keyword: 5
monthly_trends: 1

Papers

Geoff: The Generic Optimization Framework & Frontend for Particle Accelerator Controls
Penelope Madysa, Sabrina Appel, Verena Kain, Michael Schenk (2025)
arXiv

Acceleration of Multi-Scale LTS Magnet Simulations with Neural Network Surrogate Models
Louis Denis, Julien Dular, Vincent Nuttens, Mariusz Wozniak, Benoît Vanderheyden, Christophe Geuzaine (2025)
arXiv

Towards generalizable deep ptychography neural networks
Albert Vong, Steven Henke, Oliver Hoidn, Hanna Ruth, Junjing Deng, Alexander Hexemer, Apurva Mehta, Arianna Gleason, Levi Hancock, Nicholas Schwarz (2025)
arXiv

TrackFormers Part 2: Enhanced Transformer-Based Models for High-Energy Physics Track Reconstruction
Sascha Caron, Nadezhda Dobreva, Maarten Kimpel, Uraz Odyurt, Slav Pshenov, Roberto Ruiz de Austri Bazan, Eugene Shalugin, Zef Wolffs, Yue Zhao (2025)
arXiv

FusionMAE: large-scale pretrained model to optimize and simplify diagnostic and control of fusion plasma
Zongyu Yang, Zhenghao Yang, Wenjing Tian, Jiyuan Li, Xiang Sun, Guohui Zheng, Songfen Liu, Niannian Wu, Rongpeng Li, Zhaohe Xu, Bo Li, Zhongbing Shi, Zhe Gao, Wei Chen, Xiaoquan Ji, Min Xu, Wulyu Zhong (2025)
arXiv