Computing Publications with Major Personal Contributions

Oliver Gutsche

July 1, 2025

A. Apresyan et al., **Detector R&D needs for the next generation e^+e^- collider**, (2023). http://arxiv.org/abs/2306.13567, arXiv:2306.13567 [hep-ex]

M. Atif et al., **Evaluating Portable Parallelization Strategies for Heterogeneous Architectures in High Energy Physics**, (2023). http://arxiv.org/abs/2306.15869, arXiv:2306.15869 [hep-ex]

B. Bockelman et al., **IRIS-HEP Strategic Plan for the Next Phase of Software Upgrades for HL-LHC Physics**, (2023). http://arxiv.org/abs/2302.01317, arXiv:2302.01317 [hep-ex]

V.D. Elvira et al., **The Future of High Energy Physics Software and Computing**, in: **Snowmass 2021**, 2022. http://arxiv.org/abs/2210.05822, arXiv:2210.05822 [hep-ex]

G. Cerati et al., **Snowmass Computational Frontier: Topical Group Report on Experimental Algorithm Parallelization**, (2022). http://arxiv.org/abs/2209.07356, arXiv:2209.07356 [hep-ex]

M. Bhattacharya et al., **Portability: A Necessary Approach for Future Scientific Software**, in: **Snowmass 2021**, 2022. http://arxiv.org/abs/2203.09945, arXiv:2203.09945 [physics.comp-ph]

D. Berzano et al., **HEP Software Foundation Community White Paper Working Group – Data Organization, Management and Access (DOMA)**, (2018). http://arxiv.org/abs/1812.00761, arXiv:1812.00761 [physics.comp-ph]

L. Bauerdick et al., **HEP Software Foundation Community White Paper Working Group - Data Analysis and Interpretation**, (2018). http://arxiv.org/abs/1804.03983, arXiv:1804.03983 [physics.comp-ph]

J. Balcas et al., **Automated Network Services for Exascale Data Movement**, *EPJ Web Conf.* 295 (2024) 01009, doi:10.1051/epjconf/202429501009

O. Gutsche et al., **The U.S. CMS HL-LHC R&D Strategic Plan**, *EPJ Web Conf.* 295 (2024) 04050, doi:10.1051/epjconf/202429504050, arXiv:2312.00772 [hep-ex]

K.H.M. Kwok et al., **Application of performance portability solutions for GPUs and many-core CPUs to track reconstruction kernels**, *EPJ Web Conf.* 295 (2024) 11003, doi:10.1051/epjconf/202429511003, arXiv:2401.14221 [physics.acc-ph]

N. Smith et al., **A Ceph S3 Object Data Store for HEP**, *EPJ Web Conf.* 295 (2024) 01003, doi:10.1051/epjconf/202429501003, arXiv:2311.16321 [physics.data-an]

N. Smith et al., **Coffea: Columnar Object Framework For Effective Analysis**, *EPJ Web Conf.* 245 (2020) 06012, doi:10.1051/epjconf/202024506012, arXiv:2008.12712 [cs.DC]

M. Cremonesi et al., **Using Big Data Technologies for HEP Analysis**, *EPJ Web Conf.* 214 (2019) 06030, doi:10.1051/epjconf/201921406030, arXiv:1901.07143 [cs.DC]

J. Albrecht et al., **A Roadmap for HEP Software and Computing R&D for the 2020s**, *Comput. Softw. Big Sci.* 3 (2019) 7, doi:10.1007/s41781-018-0018-8, arXiv:1712.06982 [physics.comp-ph]

- Full List of Physics Publications with Major Personal Contributions can be found here.
- Full List of Computing Publications with Major Personal Contributions can be found here.
- Full List of Publications from all Collaborations and Experiments can be found here.