

Accelerating the World's Largest Accelerators

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Abstract

- CERN – European Organization for Nuclear Research
- Doctoral Student with NTUA as supervising university
- Computer architecture and hard/software HPC techniques to accelerate complex simulators



Blond I

- BLoND – Beam Longitudinal Dynamics simulator
- Developed in Python with C kernels for the hotspots
- Used at CERN, KEK



LHC Blow-up

PS-SPS Transfer

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BLond++

Future plans + challenges

Thank you all for your attention!

