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The Computing Cluster of the Silesian University in Opava

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This document provides an overview of the services offered by the Laniakea High-Performance Computing (HPC) Cluster at the Silesian University in Opava. It further outlines the recommended citation format for publications that make use of the Laniakea computational infrastructure.

Laniakea Services

Laniakea is the institutional high-performance computing infrastructure of the Silesian University in Opava maintained by the Institute of Physics in Opava. It provides researchers, academic staff, and authorized personnel with access to advanced computational resources for scientific research, data analysis, numerical simulations, machine learning, and other compute-intensive applications.

The cluster comprises a range of modern computational systems, including multi-core CPU architectures and accelerator-based platforms (e.g., GPU-enabled nodes). Laniakea is designed as a shared facility supporting interdisciplinary research across physics, astrophysics, computer science, data science, mathematics, engineering, natural sciences, and other scientific and scholarly disciplines within the university.

Beyond providing hardware resources, Laniakea also supports the development of innovative computational workflows, optimized software environments, and advanced research services in collaboration with both internal and external research partners.

Referencing Laniakea in Publications

All publications resulting from research conducted using the Laniakea Cluster are kindly requested to acknowledge its use. The following acknowledgement text should be included in the publication:

The authors acknowledge the use of the Laniakea Computing Cluster at the Silesian University in Opava in carrying out this research.

Where applicable, the acknowledgement should be accompanied by the official DOI reference of this document available via Zenodo.

After publication, authors are kindly requested to notify the Laniakea administration by sending publication details to laniakea@slu.cz.