



Open Research Data in Switzerland

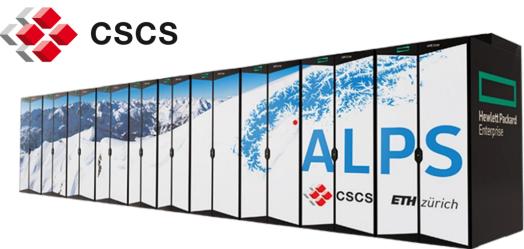
- PSI Steering committee for data management activities
- ETH Domain Level Program (6 institutions of the ETH Domain 2021-2024)¹
- National ORD Strategy²
- International relations through
 - Domain activities e.g. NeXus community
 - EOSC,
 - ExPaNDS, PaNOSC, LEAPS, LENS, EOSC-Future....
 - RDA etc.

¹Open Research Data Position of the ETH Domain, adopted by the ETH Board on 13/14 May 2020: https://www.ethrat.ch/sites/default/files/ORD_Position_ETH_Domain.pdf

²A final draft, to be approved by the Schweizerische Hochschulkonferenz (SHK) is available: https://www.swis-suniversities/Dokumente/Organisation/SUK-P/SUK_P-2/OpenScience_Strategy_v2.5_clean.pdf

PAUL SCHERRER INSTITUT

HPC for the experiment/research lifecycle: Future



Computers | Alps

ALPS

Planned to come online in 2023, the "Alps" system infrastructure will replace CSCS's existing Piz Daint supercomputer and serve as a general-purpose system open to the broad community of researchers in Switzerland and the rest of the world.

The first cabinets of the "Alps" research infrastructure have been installed and accepted in November 2020. This phase comprises of 1'024 compute nodes based on the HPE Cray supercomputing architecture with Slingshot interconnect, and HPE ClusterStor storage system. Each node is equipped with two AMD EPYC(TM) 7742 64-Core processors. The scratch storage capacity is 10 PetaBytes.

Read the press release >



The first cabinets of the "Alps" research infrastructure have been installed in November 2020. (Image: CSCS)

TransALPS:

- PSI and CSCS joint initiative to provide 'elastic' resources to PSI researchers and research communities.
- -2020 2025
- Platform for EOSC integration for PaN users through ExPaNDS



New Scientific Computing, Theory and Data

Division

Research Committee	Prof. Dr. Marco Stampanoni
Human Resources Management	Karsten Bugmann
Center for Proton Therapy	Prof. Dr. Damien Weber

Director:

Prof. Dr. Christian Rüegg

Members of the board of directors:

Prof. Dr. Gabriel Aeppli* Dr. Peter Allenspach Prof. Dr. Andreas Pautz Prof. Dr. Gebhard F. X. Schertler

Prof. Dr. Thomas J. Schmidt Prof. Dr. Mike Seidel

Dr. Thierry Strässle*

Directorate Support	Dr. Thierry Strässle
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Science	Dr. Ines Günther-Leopold Dr. Michèle Erat
Finance and Administrative Services	Dr. Frank Behner
Technology Transfer	John Millard
General Information Technology	Dr. Gerd Mann

Research Division

Biology and Chemistry (BIO)

Prof. Dr. Gebhard Schertler

Center for Radiopharmaceutical Sciences Prof. Dr. Roger Schibli

Biomolecular Research Prof. Dr. Michel Steinmetz

Nanoscale Biology Prof. Dr. G. V. Shivashankar Research Division Research with

Neutrons and Muons (NUM)

Dr. Alex Amato a.i.

Particle Physics Prof. Dr. Klaus Kirch

Neutron Scattering and Imaging Prof. Dr. Michel Kenzelmann

Muon Spin Spectroscopy Dr. Thomas Prokscha a.i.

Neutron and Muon Instrumentation Prof. Dr. Marc Janoschek

Multiscale Materials Experiments Prof. Dr. Laura Heyderman Research Division

Nuclear Energy and Safety (NES)

Prof. Dr. Andreas Pautz

Reactor Physics and Thermal Hydraulics Hakim Ferroukhi

Hot Laboratory Dr. Marco Streit

Waste Management Prof. Dr. Sergey Churakov

Nuclear Materials Dr. Manuel Pouchon

Radiochemistry Dr. Robert Eichler Research Division

Energy and Environment (ENE)

Prof. Dr. Thomas I. Schmidt

Central Platforms:

Operando Spectroscopy Dr. Maarten Nachtegaal

Dr. Peter Jansohn

Bioenergy and Catalysis Prof. Dr. Oliver Kröcher

Electrochemistry Dr. Felix Büchi a.i.

Atmospheric Chemistry Denise Verhoeven i.P. Dr. I. El Haddad a.i.

Environmental Chemistry Prof. Dr. Margit Schwikowski

Catalysis and Sustainable Chemistry Prof. Dr. Jeroen van Bokhoven Research Division

Photon Science (PSD)

Prof. Dr. Gabriel Aeppli

Macromolecules and Bioimaging Dr. Oliver Bunk

Micro- and Nanotechnology Dr. Yasin Ekinci a.i.

Condensed Matter Prof. Dr. Frithjof Nolting

Femtochemistry Prof. Dr. Christoph Bostedt

Advanced Photonics Prof. Dr. Luc Patthey

Nonlinear Optics Prof. Dr. Adrian Cavalleri 1

Scientific Computing, Theory and Data (SCD)

Research Division

Prof. Dr. Christian Rüege, a.i.

Simulation and Modelling Dr. Andreas Adelmann

Computational and Theoretical Physics Prof. Dr. Andreas Läuchli

Materials Simulations Prof. Dr. Nicola Marzari

Science IT, Infrastructure and Services Dr. Alun Ashton Division

Large Research Facilities (GFA)

Prof. Dr. Mike Seidel

Accelerator Operation and Development PD Dr. Daniela Kiselev

Electronics and Control Systems Dr. Thomas Schilcher

Engineering and Coordination Kilian Rolli

Accelerator Technologies Dr. Hans-Heinrich Braun Division

Logistics (LOG)

Dr. Peter Allenspach

Finance and Administrative Services Dr. Frank Behner

Buildings and Services Lilian lakob

Infrastructure and Electrical Installation Markus Jörg

Information Technology Ronny Peterhans

Radiation Safety and Security Dr. Sabine Mayer

Communications Dr. Mirjam van Daalen a.i.

Energy Systems Analysis Dr. Vinh N. Dang a.i.



New SCD Division – Start 1 July 2021

Forschungsbereich

Computergestützte Wissenschaften, Theorie und Daten (SCD)

Prof. Dr. C. Rüegg a.i. 7000

Stv. Bereichsleitung	Dr. T. Strässle a.i.	700
Bereichsvertretung Technologi	ietransfer J. Millard	111
Bereichspersonalleitung	R. Gröbli	132
Bereichsfinanzleitung	M. Engroñat	910
Bereichssekretariat	V. Gerbino Sabatini	700

EPFL

EPFL







Simulation und Modellierung (LSM)

Dr. A. Adelmann a.i. 7100

7102

Beschleuniger-Modellierung Dr. A. Adelmann i.P.

Numerische Fluiddynamik Dr. B. Niceno 7103

Fortschrittliche Nuklearsysteme PD Dr. K. Mikityuk 7104

SDSC Hub am PSI Dr. A. Adelmann a.i. 7109





Computergestützte Physik Prof. Dr. A. Läuchli (EPFL) i.P.

Theorie kondensierter Materie Prof. Dr. C. Mudry 7202 Materialwissenschaftliche Simulationen (LMS) Prof. Dr. N. Marzari (EPFL)

Materialwissenschaftliche Software and Data Prof. Dr. N. Marzari (EPFL) i.P. 7301

Multiskalen Materialmodellierung Dr. M. Krack 7302





Wissenschaftliche IT, Infrastruktur und Dienstleistungen (AWI) Dr. A. Ashton

Dr. A. Ashto 7900

Entwicklung und Betrieb von Experiment IT Dr. A. Ashton a.i. 7910

Datenverarbeitungsentwicklung und Beratung X. Yao a.i. 7920

Management wissenschaftlicher Daten Dr. S. Egli 7930

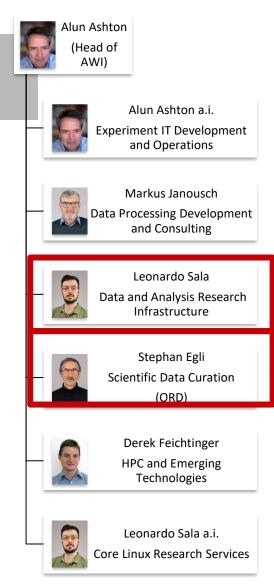
Forschungsdaten und Datenanalyse Infrastruktur Dr. L. Sala 7940

Hochleistungsrechnen und neue Technologien Dr. D. Feichtinger 7950

Linux Dienste für die Forschung Dr. L. Sala a.i. 7960



Scope: Science IT Infrastructure and Services



Data Chain

- Software (based on research demands and prioritization)
- Storage (online for SCD, PSD, NES and BIO, archive services for PSI)
- HPC (for SCD, PSD, NES and BIO, expandable for PSI research)
- Coordinator and IT Architect for Controls and Science IT activities for SLS 2.0



Marie Yao

Communication/Coordination/Community

