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Poland

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National Science Centre Poland

Ministry of Education and Science

SOLARIS National Synchrotron Radiation Centre: open-access infrastructure for research

Jakub Szlachetko on behalf of the team

SOLARIS National Synchrotron Radiation Centre

SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE

Introduction to SOLARIS

SOLARIS is a third-generation light source and since 2018 provides **open access to research infrastructure**

Building of the SOLARIS Centre located at Campus of Jagellonian University in Krakow

Location of the League of European Accelerator-based Photon Sources (LEAPS) facilities

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NATIONAL SCIENCE CENTRE POLAND

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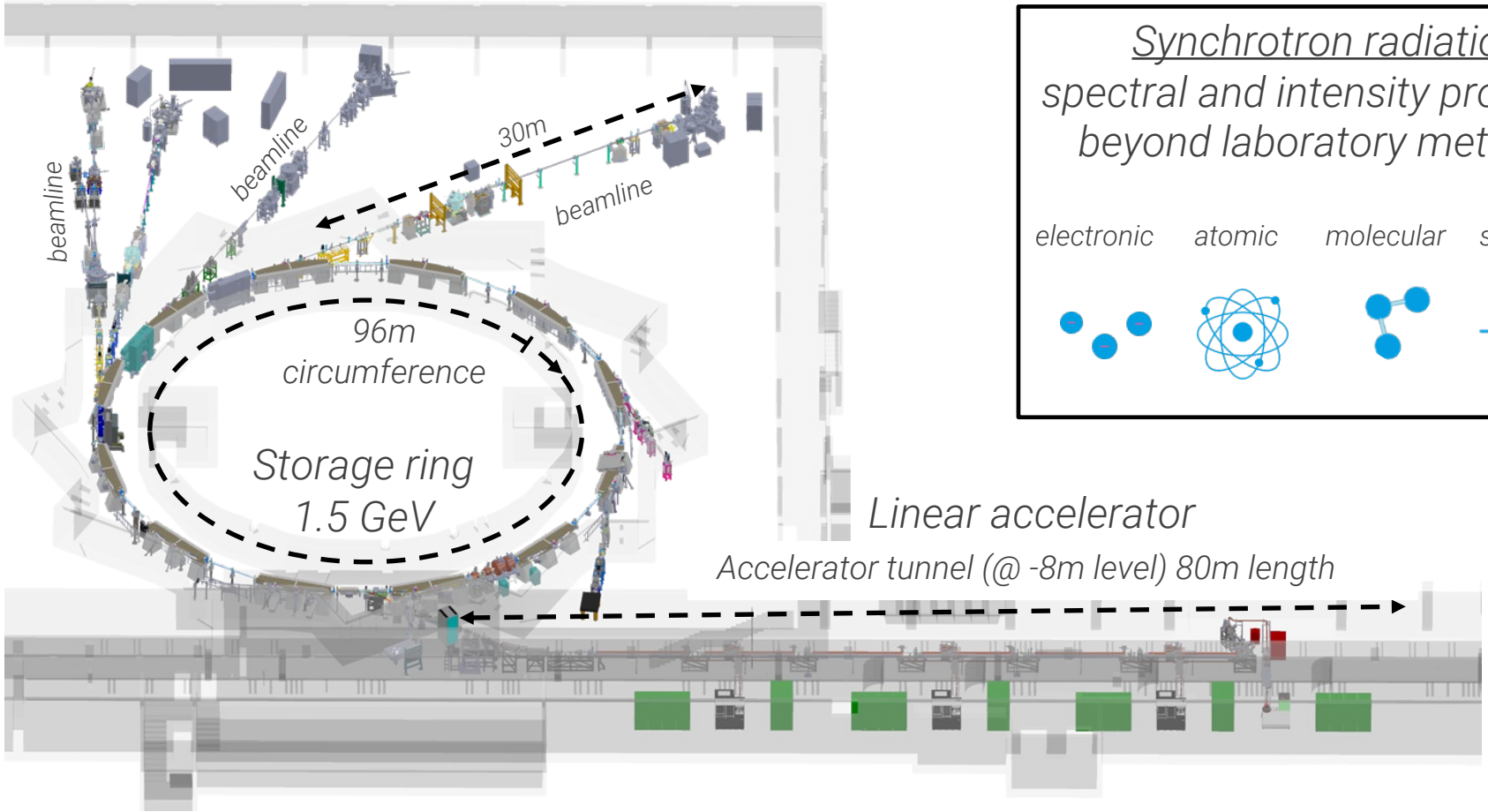
SOLARIS accelerators & synchrotron radiation

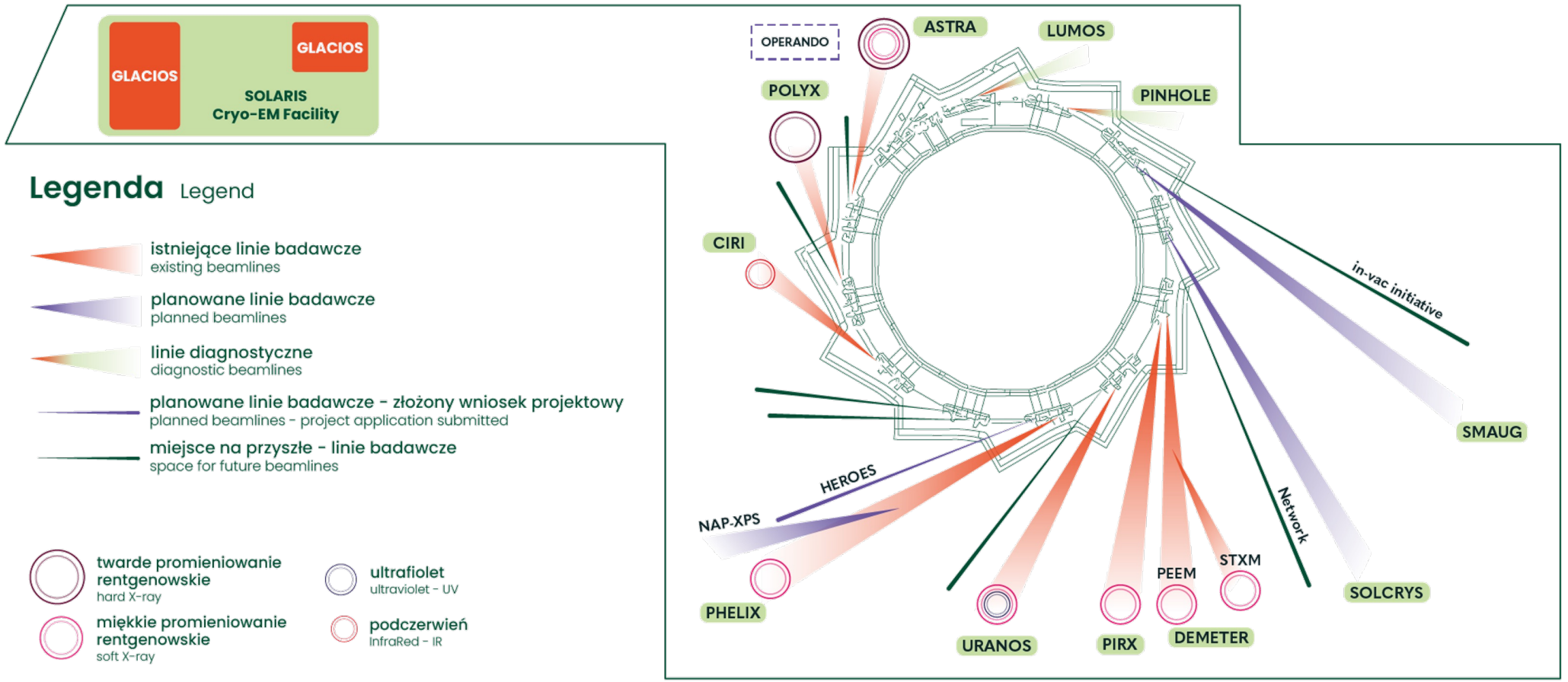


Synchrotron radiation:
spectral and intensity properties beyond laboratory methods:

electronic *atomic* *molecular* *structural*

SOLARIS research infrastructure

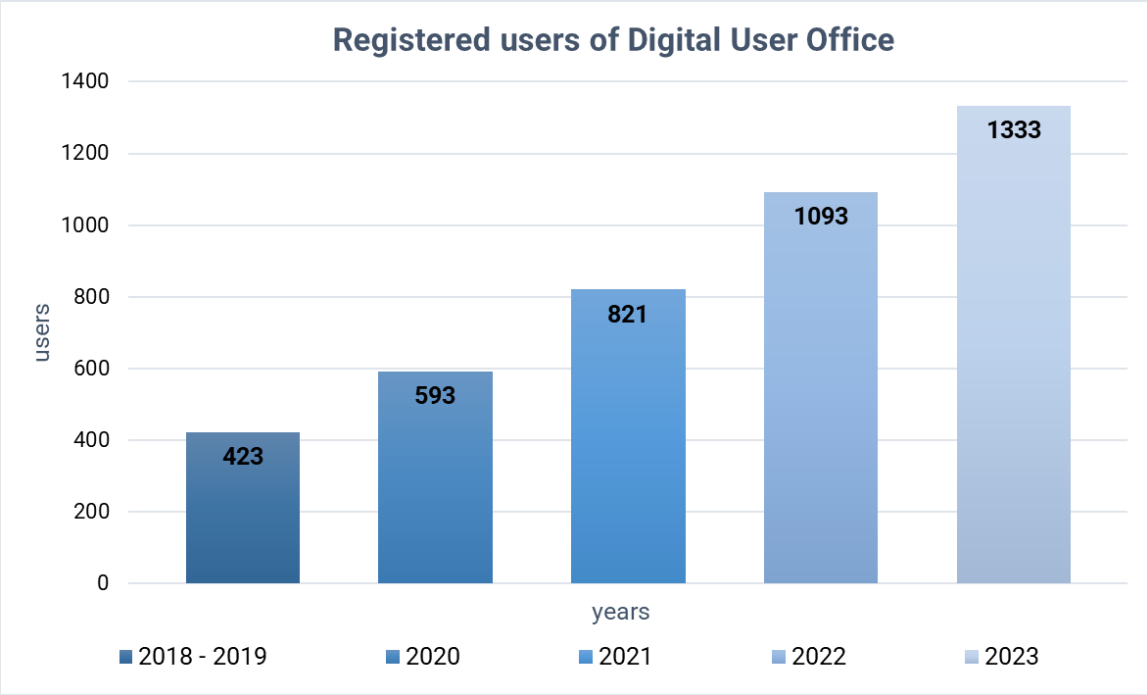
Beamlines & Cryo-electron microscopes - package of unique experimental methods for extraordinary research projects



Access to SOLARIS and users' community

Scientific access:

- free of charge and with open call for projects 2x per year
- applications accessed on scientific merit by the international committee
- typical projects execution takes 2-5 days with 24h operation
- development of dedicated platform for open-access infrastructure (SUN - Solaris Users Network)



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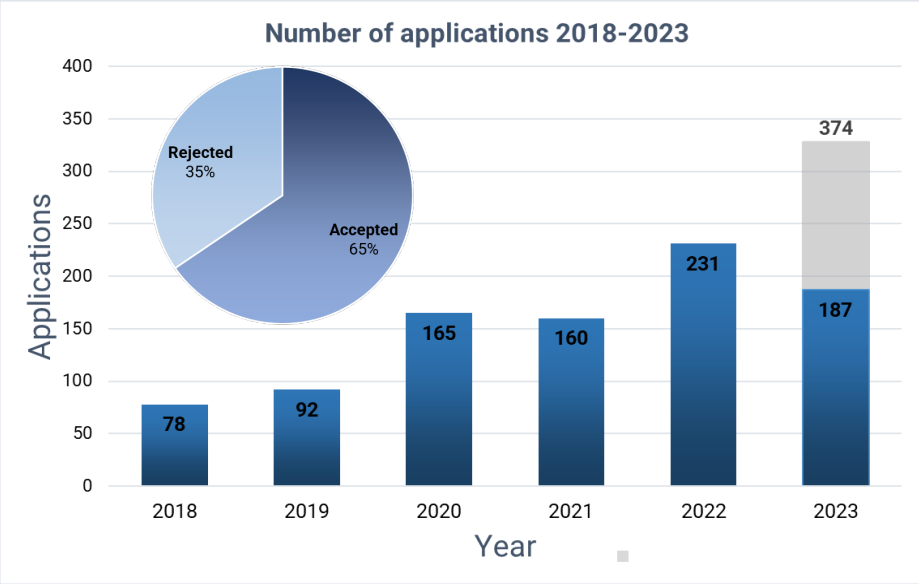
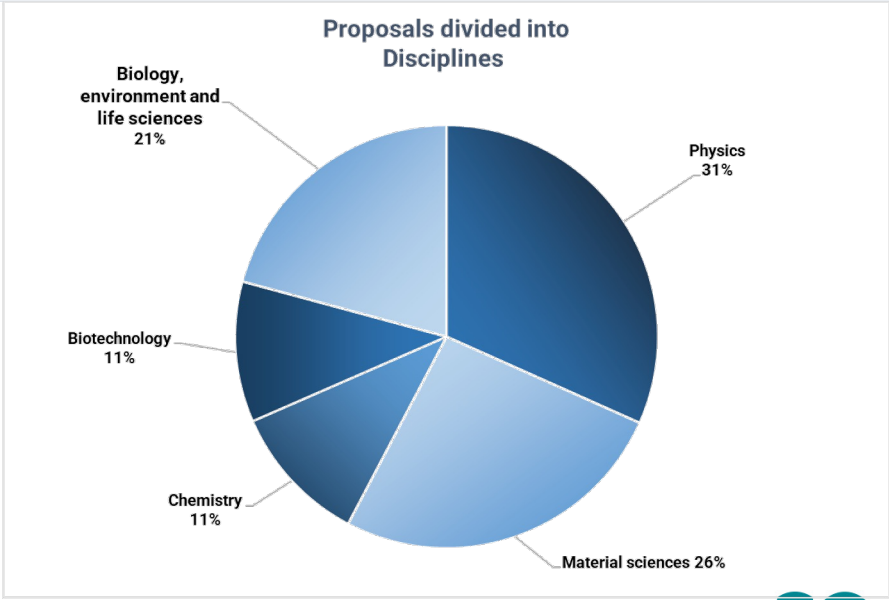
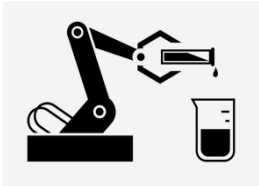
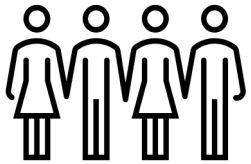




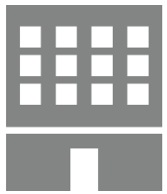
Number of projects per year:



≈ 370 applications
≈ 200 experiments



≈ 700 scientists



≈ 70 research units

SOLARIS: interaction with non-scientific community

Key performance indicators:

Data from 1st Nov. 2023

	2022	2023
Number of visitors	1760	2040
Number of social media followers	3035	4170
Number of outreach events	15	13 ↗
Number of press apperances in the media	45	45 ↗

Starting in 2024: visitors hub and knowledge path dedicated to primary and secondary schools

SOLARIS data procedures

SOLARIS users generates about 180TB of data monthly, but SOLARIS is not the owner of the data.

Support for storage and access to experimental data:

- the guaranteed data storage period is 6 months for synchrotron research lines and 3 months for CryoEm/Glacios
- data placed on a disk array, so the risk of data loss is minimized
- remote access to experimental data is possible for authorized persons (for a week from the request for remote access)
- Solaris has ISO-27001 certificate that significantly increases the level of data security.

We are open to be a partner in discussions on EOSC and in area of needs reported by the scientific community for IT infrastructure, computing and data storage.

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Thank you for your attention!

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