

PAUL SCHERRER INSTITUT

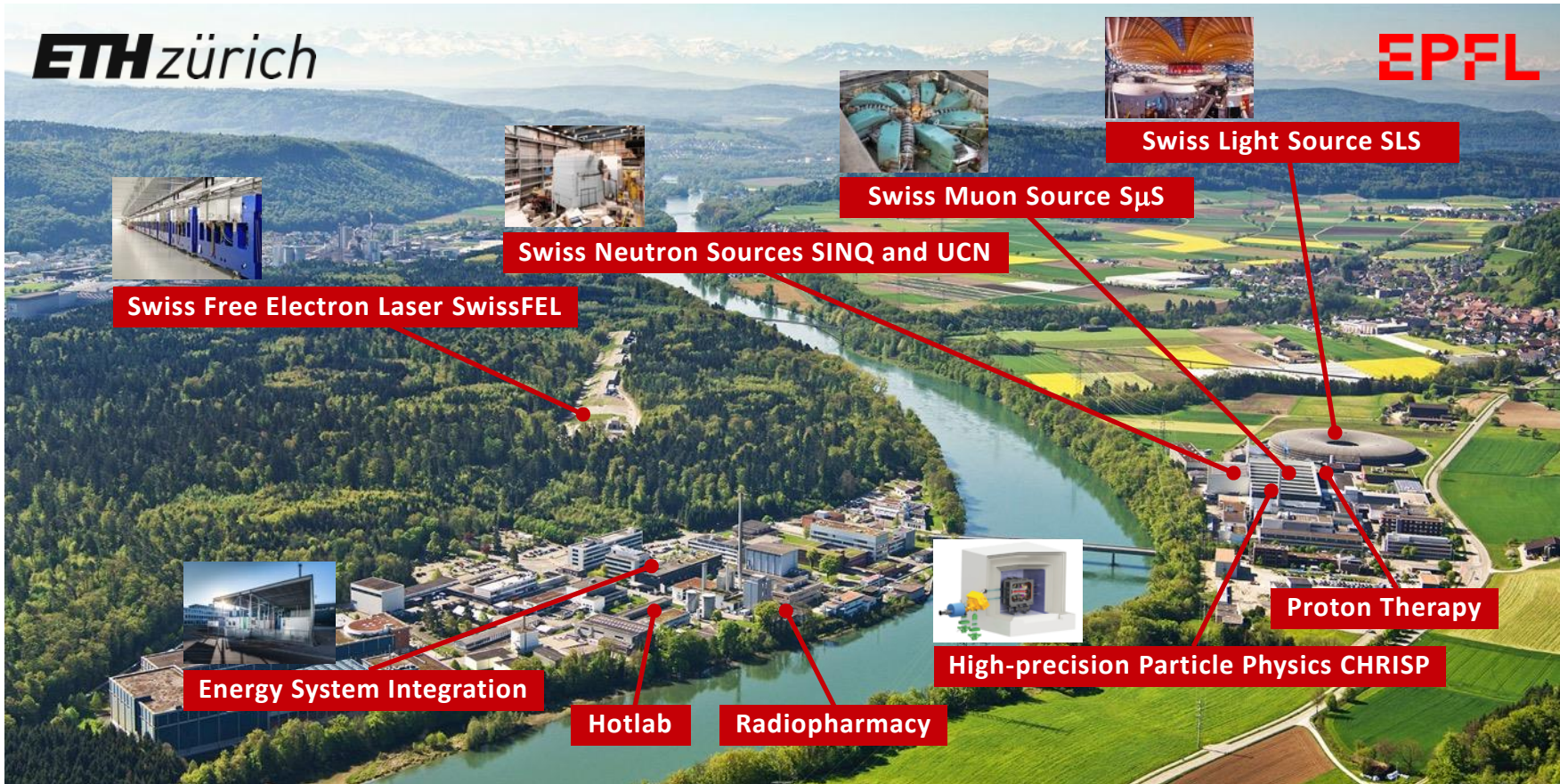
PSI









Welcome and News from PSI

Christian Rüegg :: Direktor :: PSI





<b>ETHZ</b> Swiss Federal Institute of Technology Zurich 	<b>EPFL</b> Swiss Federal Institute of Technology Lausanne 	<b>PSI</b> Paul Scherrer Institute 	<b>Empa</b> Swiss Federal Laboratories for Materials Testing 	<b>WSL</b> Swiss Federal Research Institute for Forestry, Snow and Landscape 	<b>Eawag</b> Swiss Federal Institute of Aquatic Science and Technology 
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PSI funds (global budget)	280	MCHF
External funding	110	MCHF
Staff (PSI and affiliated)	2500	
<ul style="list-style-type: none"> <li>Professors at ETH, EPFL, universities</li> </ul>	64	
<ul style="list-style-type: none"> <li>Engineers and technicians</li> </ul>	1000	
<ul style="list-style-type: none"> <li>Postdocs, PhD students, apprentices</li> </ul>	720	
External users: people / visits	2400 / 4900	per year
Number of scientific publications	1400 (13 % high impact)	per year
Patient visits (proton therapy treatment)	6300	per year

FUNDAMENTALS  
OF NATURE

ENERGY  
AND  
CLIMATE

ACCELERATORS  
from  
conception  
to data

FUTURE  
TECHNOLOGIES

HEALTH  
INNOVATION

EXCELLENCE IN SCIENCE  
AND TECHNOLOGY

WORKFORCE  
OF THE FUTURE

INNOVATION

BIG MACHINES FOR SCIENCE  
AND INDUSTRY

LARGE SCALE ENGINEERING AND PROJECT REALISATION

TECHNOLOGY TRANSFER, INDUSTRY COLLABORATION

**ETH** zürich

**EPFL**

PAUL SCHERRER INSTITUT

**PSI**



**Empa**

Materials Science and Technology



**eawag**  
aquatic research

ETH DOMAIN



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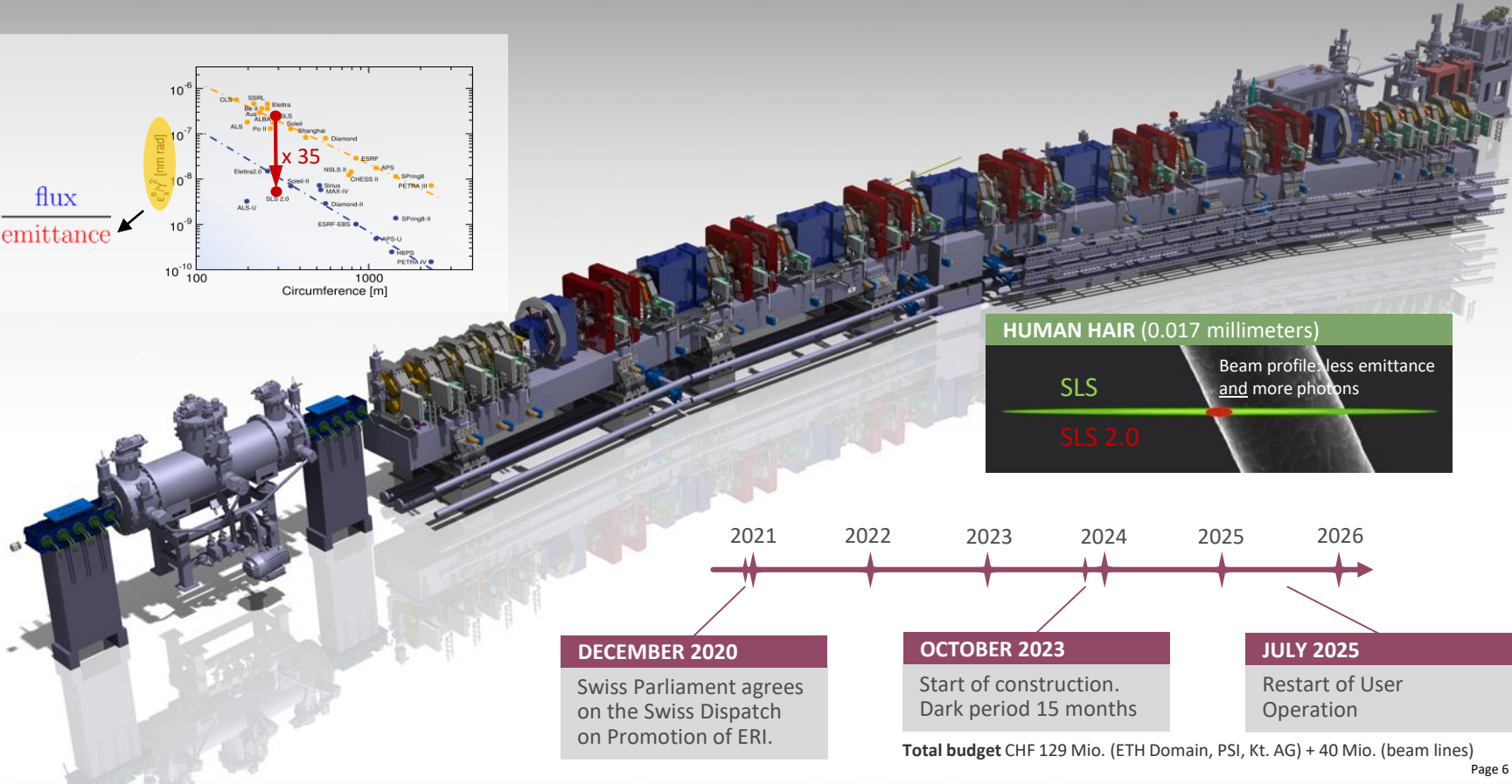
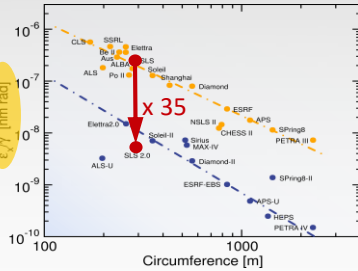
eawag  
aquatic research

ETH DOMAIN

# SLS 2.0: The success story continues

$$B = \frac{\text{flux}}{\text{emittance}}$$

Brilliance

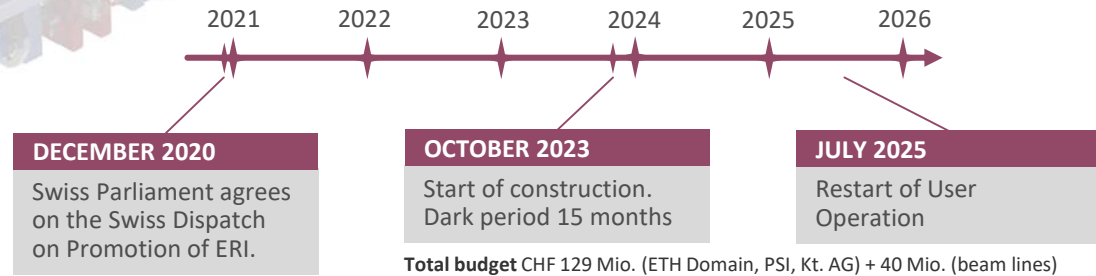


**HUMAN HAIR (0.017 millimeters)**

SLS

SLS 2.0

Beam profile: less emittance and more photons



Total budget CHF 129 Mio. (ETH Domain, PSI, Kt. AG) + 40 Mio. (beam lines)

**IMPACT:** On the National Roadmap 2023

**HIMB:** High-Intensity Muon Beam for particle physics and material science

$S\mu S$  & CHRISP

↑ SINQ

UCN

HIPA cyclotron

**TATTOOS:** radionuclides for cancer therapy



PAUL SCHERRER INSTITUT

PSI



SWITZERLAND  
INNOVATION  
PARK INNOVAARE



Technology Transfer



PSI offers a world-wide unique combination of large-scale facilities and technology platforms for a broad range of research and development in science and medicine, education and collaboration with industry. **Particle physics and related technologies from accelerators to detectors, data and HPC remain some of our core competences.**

- **IMPACT** is the new large-scale infrastructure project (BFI Period 2025-2028) with 100x increased muon flux for particle physics and material science experiments.
- **CERN** and its future accelerator project e.g. **FCC** are a priority for Switzerland and PSI. It will require close, global **collaboration between national laboratories** and partners.
- Budget outlooks are not great in Switzerland with direct consequences for investments and operation.