PSI facilities newsletter

https://www.psi.ch/science/facility-newsletter

SLS - WHAT WILL THE SLS 2.0 UPGRADE MEAN FOR EXPERIMENTS?



"The philosophy of the SLS has always been to explore novel techniques and use cutting-edge hardware, which has resulted in breakthroughs in areas such as imaging, X-ray spectroscopies, macro-molecular crystallography and detector technologies," write Phil Willmott and Hans Braun in an article about the SLS 2.0 upgrade in Synchrotron Radiation News this month.

Read more: <u>https://www.psi.ch/en/science/scientific-highlights/what-will-the-sls-20-upgrade-mean-for-experiments</u>

SLS 2.0 – The Upgrade of the Swiss Light Source Philip R. Willmott and Hans Braun Synchrotron Radiation News, 1. March 2024

DOI: https://doi.org/10.1080/08940886.2024.2312059

SLS — RESCUING MUSIC WITH X-RAYS



PSI researchers are developing a technique that uses the special synchrotron X-ray light from the Swiss Light Source SLS to non-destructively digitise recordings from high-value historic audio tapes — including treasures from the Montreux Jazz Festival archive, such as a rare recording of the King of the Blues, B.B. King.

Read more: <u>https://www.psi.ch/en/media/our-research/rescuing-music-with-x-rays</u>

SWISSFEL — THE SECRET LIFE OF AN ELECTROMAGNON



DNA damage to the genetic material DNA drives cancer, ageing, and cell death. Therefore, DNA repair is crucial for all organisms, and a deeper understanding of this basic function helps us better comprehend how life around us survives and thrives. An international team of researchers has now revealed how the enzyme photolyase efficiently channels the energy of sunlight into DNA repair chemistry.

Read more: <u>https://www.psi.ch/en/media/our-research/repairing-genetic-damage-with-sunlight</u>

Time-resolved crystallography captures light-driven DNA repair Nina-Eleni Christou *et al.* Science, 01.12.2023

DOI: 10.1126/science.adj4270