

PSI facilities newsletter<br>https://www.psi.ch/science/facility-newsletter<br>https://synchrotron-analysis.ch/

## SLS: SLS 2.0: "DARK TIME" DURING THE UPGRADE



At 8 a.m. on the morning of Saturday 30 September, the Swiss Light Source SLS, one of PSI's five large research facilities, was shut down. It will come back online in 2025, ready to supply even more powerful synchrotron light than ever for innovative scientific experiments.

Read more: https://www.psi.ch/en/media/our-research/sls-20-dark-time-during-the-upgrade

## SLS - WHITLOCKITE IN MAMMARY MICROCALCIFICATIONS IS NOT ASSOCIATED WITH BREAST CANCER



Microcalcifications, small deposits of calcium-containing minerals that form in breast tissue, are often, but not always, a warning sign of breast cancer. The relationship between microcalcifications and cancer has not been fully understood thus far. Researchers discovered now that the relationship between microcalcifications and tumors seems to be linked to the presence of a particular mineral called whitlockite, which is rich in magnesium and is found in microcalcifications only in the absence of tumors.
Read more: https://www.psi.ch/en/lsb/scientific-highlights/whitlockite-in-mammary-microcalcifications-is-not-associated-with-breast
Carlo Morasso et al., Cancer Communications 43, 1169-1173 (2023).
https://doi.org/10.1002/cac2.12481

## SLS - EFFICIENT MAGNETIC SWITCHING IN A CORRELATED SPIN GLASS



The interplay between spin-orbit interaction and magnetic order is one of the most active research fields in condensed matter physics and drives the search for materials with novel, and tunable, magnetic and spin properties. Here we report on a variety of unique and unexpected observations in thin multiferroic $\mathrm{Ge}_{1-\mathrm{x}} \mathrm{Mn}_{\mathrm{x}} \mathrm{Te}$ films.

Read more: https://www.psi.ch/en/num/scientific-highlights/efficient-magnetic-switching-in-a-correlated-spin-glass
J. Krempaský et al, Nature Communications 14, 6127 (2023)

