

## Editorial



**J. Friso van der Veen**

Last year the Swiss Light Source celebrated its 10<sup>th</sup> years anniversary. User operation started in 2001 with just four beamlines. Now the SLS has eighteen beamlines, covering the entire radiation spectrum from the infrared to the hard X-ray range. From day one of its operation, the SLS storage ring featured small-gap in-vacuum undulators in combination with top-up injection. These features, combined with stable temperature in the ring tunnel and sophisticated beam position monitoring, provided extremely high stability and reliability. Recently, the machine group achieved a 'world record' low value ([http://gfa.web.psi.ch/news/sls\\_wr2011.php](http://gfa.web.psi.ch/news/sls_wr2011.php)) for the vertical emittance of 1pm rad. The users have greatly profited from these excellent beam conditions. In the first ten years of SLS operation, the SLS users have generated more than 2000 publications, many of them in high-impact journals. The in-house staff has contributed substantially to the advancement of high-resolution spectroscopy, imaging and diffraction. Last but not least, our detector group is a world leader in the development of hybrid pixel detectors (PILATUS). I would like to thank all users for the excellent science that they have brought to the SLS and the PSI staff for their inventiveness and support.

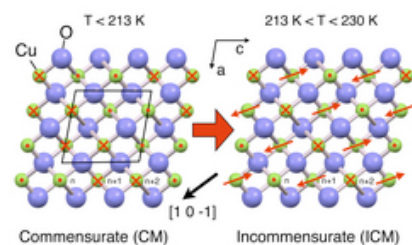
## Announcement



### Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy NMI3-II has been launched by Feb 1, 2012

The aim of the Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy (NMI3) is to facilitate the pan-European coordination of neutron scattering and muon spectroscopy research activities, by integrating all the research infrastructures in these fields within the European Research Area. The facilities do provide transnational access to European users by offering more than 4000 days of beam time over the next four years within the project. At PSI both the spallation neutron source SINQ and the Swiss muon source SμS are NMI3 partner facilities and can support their European users by travel and subsistence funds for their experiments at PSI. For more information please consult: <http://www.nmi3.eu> or contact the PSI user office: [useroffice@psi.ch](mailto:useroffice@psi.ch)

## Research highlights



### It works: Ultrafast magnetic processes observed "live" using an X-ray laser

S. L. Johnson, R. A. de Souza, U. Staub et al.

Phys. Rev. Lett. 108, 037203 (2012); DOI:

10.1103/PhysRevLett.108.037203

In first-of-their-kind experiments performed at the American X-ray laser LCLS, a collaboration led by researchers from the Paul Scherrer Institute has been able to precisely follow how the magnetic structure of a material changes. The study was

carried out on cupric oxide (CuO).

<http://www.psi.ch/media/it-works-ultrafast-magnetic-processes-observed-live-using-an-x-ray-laser>.