

J. Friso van der Veen

“The Swiss Light Source - Some Recent Highlights”

J. Friso van der Veen has been full Professor of Experimental Physics at the ETH Zürich since May 2000. He is head of the Research Department of Synchrotron Radiation and Nanotechnology at the Paul Scherrer Institut in Villigen, Switzerland. His current research interests lie in the application of synchrotron x-ray scattering techniques for studies of the structural properties of solid-liquid interfaces and of confined fluid films. Studies of this kind help us to understand the atomic-scale processes underlying melting, freezing, crystal growth, and boundary lubrication. In 1998, van der Veen was awarded the IUVSTA Prize by the International Union for Vacuum Science, Techniques and Applications.



Third-generation synchrotron radiation sources operating in the medium-energy range (2.5-3 GeV) can now produce high-brilliance x-ray beams up to ca 20 keV, as has been demonstrated at the Swiss Light Source (SLS). After a brief introduction to the SLS, this talk will present some recent highlights in the following research areas: ultrafast imaging of magnetic domains in motion, spectroscopy of correlated electron systems, phase contrast imaging, coherent x-ray diffraction, and interference lithography.

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Bldg. 402, APS Auditorium • Argonne National Laboratory

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