



Institutskolloquium

Am **18. November 2005, 11:00 Uhr** spricht:

Prof. Dr. Lars G.M. Pettersson
FYSIKUM

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über

The Local Structure of Water

Through model experiments and spectrum simulations we show that the specific features in the x-ray absorption spectrum of liquid water are due to a predominance of asymmetric configurations with only two strong hydrogen bonds [1]: one donating and one accepting, indicative of chain- or ring-like structures in the liquid not reproduced by present simulation techniques. This result has caused a heated debate in the literature. Here I will discuss the interpretation of recent applications of synchrotron based spectroscopies (x-ray absorption and emission, photemission and Compton scattering) to liquid water and their implication for the structure of the liquid related also to the interpretation of neutron and x-ray diffraction data.

[1] Wernet et al, *Science* **304**, 995 (2004)

**Ort: Max-Born-Saal,
MBI, Max-Born-Str. 2a**

Interessenten sind herzlich eingeladen.

Prof. Dr. Th. Elsässer