
Einladung zum
WIENER PHYSIKALISCHEN KOLLOQUIUM
www.univie.ac.at/wpk

**Cesium feels the heart beat:
optical magnetometers in applied
and fundamental research**

Antoine WEIS

Physics Department, University of Fribourg, Switzerland

Magnetometers based on optically pumped atomic vapors have been known for half a century. Recently the advent of compact, tunable lasers, which can replace the discharge lamps of conventional magnetometers, has renewed the interest in optical magnetometry. They allow one to realize more sensitive devices and permit to use a single light source for operating many sensor heads. I will report on our research in optical magnetometry and discuss two applications, viz. their use for the measurement of dynamic field maps generated by the human heart and in an experiment searching for a permanent electric dipole moment of the neutron.

Montag, 17. Oktober 2005, 17:30 Uhr
(ab 17:00 Uhr Kaffee)

Großer Hörsaal des Institutes für Experimentalphysik der Universität Wien
Strudlhofgasse 4/1. Stock, A-1090 Wien

Universität Wien

ÖPG

TU Wien

Unterstützt vom Kulturstadtrat der Stadt Wien