

EINLADUNG ZUM
WIENER PHYSIKALISCHEN KOLLOQUIUM

**Spinpolarised ^3He : From basic research
to medical applications**

Werner HEIL

Institute of Physics, University of Mainz

Polarisation of ^3He by optical pumping is well known since the early 1960s with first applications in fundamental physics. In 1994 it was discovered that one can use hyperpolarised ^3He as contrast agent for magnetic resonance imaging (MRI) of the lung. The wide interest in this new method made it necessary to find ways of polarising ^3He in large quantities and with high polarisation degrees. In addition, storage, transport and administration of hyperpolarised ^3He as well as recovery of this rare helium isotope became important issues in assessing and spreading the new, non-invasive diagnostic tool in research and medical practice. The talk gives an overview on MRI with hyperpolarised ^3He .

Montag, 14. Dezember 2009, 17:30 Uhr
(ab 17:00 Uhr Kaffee)

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