

Molecular Beam of Polarized Hydrogen

D.K. Toporkov

Abstract Hydrogen and deuterium exists as two spin isomers, ortho and para, with the nuclear magnetic moments of the atoms either parallel or antiparallel. The spatial separation of the orthohydrogen molecules with respect to their nuclear moment in strongly inhomogeneous field of superconducting sextupole magnets is described. The scheme of the experimental setup and the results obtained under the study are presented.

D.K. Toporkov
Budker Institute of Nuclear Physics, 630090 Novosibirsk, Russia and Novosibirsk State University, 630090 Novosibirsk, Russia; e-mail: D.K.Toporkov@inp.nsk.su }