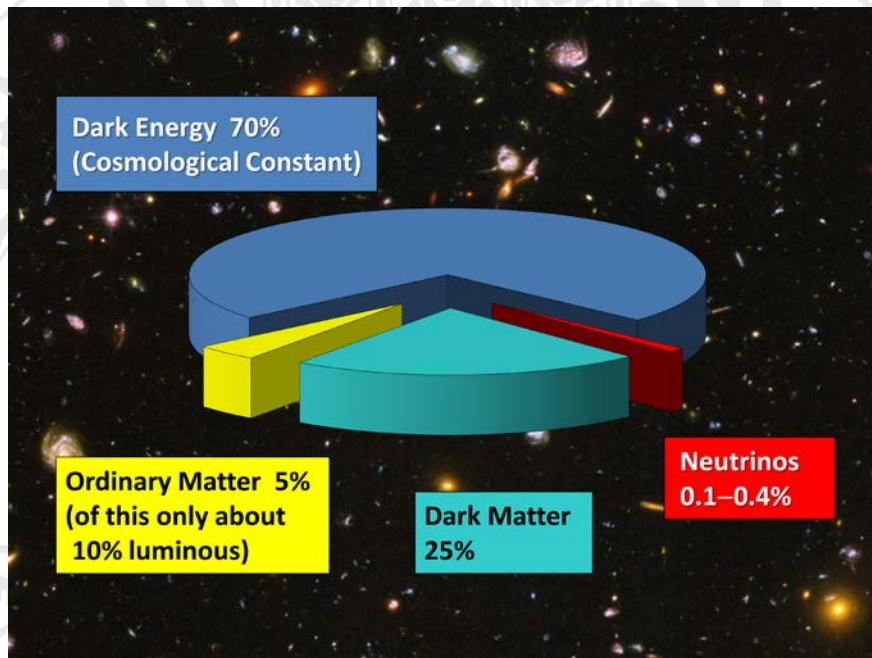


PHYSIKALISCHES KOLLOQUIUM

AM 6. JULI 2015 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



THE DARK SIDE OF THE UNIVERSE

DR. GEORG RAFFELT

MAX-PLANCK-INSTITUT FÜR PHYSIK, MÜNCHEN

The universe is dynamically dominated by several mysterious gravitating components of unknown physical origin. The best-understood but smallest component of the "dark universe" consists of neutrinos and actually cosmology provides crucial information on their masses. The assumed "cold dark matter" which dominates the dynamics of our own Milky Way Galaxy can be locally detected in laboratory experiments if it indeed consists of a new class of weakly interacting elementary particle. The astrophysical evidence for the dark side of the universe and ideas for solutions and ongoing searches will be reviewed. One lesser-known particle dark matter candidate, the axion, will be advertised.