

ARNOLD SOMMERFELD

CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Norbert Straumann

University of Zurich

A simple proof of the Kochen-Specker theorem on the problem of hidden variables

In this talk I present a simple derivation of an old result of Kochen and Specker, which is apparently unrelated to the famous work of Bell on hidden variables, but is presumably equally important. Kochen and Specker showed in 1967 that quantum mechanics cannot be embedded into a classical stochastic theory, provided the quantum theoretical probability distributions are reproduced and one additional highly desirable property is satisfied. This showed in a striking manner what were the difficulties in implementing the Einstein programme of a `complete' version of quantum mechanics.

Wednesday, 2nd December 09, 10:30 h, Room 348 / 349, Theresienstr. 37 / III

Prof. V. Mukhanov