

Kochen-Specker Theorem in Krein Space

Matvejchuk M., Utkina E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014, Springer Science+Business Media New York. The well known Kochen-Specker's theorem (Kochen and Specker J. Math. Mech. 17:59-87, 1967) is devoted to the problem of hidden variables in quantum mechanics. In the paper we present a geometric proof for an indefinite analogy of Kochen-Specker's theorem. On the real three-dimensional Krein space there exists unique two-valued probability measure.

<http://dx.doi.org/10.1007/s10773-014-2041-9>

Keywords

Idempotent, Indefinite metric space, Krein space, Probability measure, Projection