Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych
Narodowego Centrum Badań Jądrowych

10 maja 2017 r. (środa), godz.12:15
pawilon NCBJ, sala 22, Hoża 69

Prof. dr hab. Piotr Kosiński

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" POINCARE COVARIANCE WITH CHIRAL PARTICLES"

ABSTRACT: The Poincare covariance of theories involving massless particles with definite helicity is, in principle, well understood. However, certain aspects seem to be slightly mysterious. In particular, it appears that, in certain circumstances, the standard Lorentz transformation rules must be supplied by an additional term proportional to the helicity. This leads to the modified transformation rules in kinetic theory of chiral Weyl particles as well as the so-called Hall effect for light. I will discuss these problems in some detail and show that we are dealing with standard Poincare transformation rules viewed from a slightly different perspective.

Serdecznie zapraszamy,

M. Kowal, W. Piechocki, L. Roszkowski, J. Skalski, L. Szymanowski