



MODELING BY USE OF ANTI-COMMUTING MATRICES

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Abstract

Many-dimensional matrix solutions of nonlinear wave equations are given. Matrix solutions are an efficient tool for modeling in different areas from elementary particles to Galaxies and Universe. A transferring from one space to another many-dimensional space is described and rotational properties of matrix solutions are shown. Wave fields similar to gauge fields in Glashow-Weinberg-Salam theory and wave fields similar to vector bosons are represented.

Keywords and phrases: anti-commuting matrices, many-dimensional space, matrix solution, nonlinear wave equation, torsion, vector boson, wave field.

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