

Hyperbolic double-complex numbers - II

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Abstract:

The first part of this work was published in the paper of L. N. Apostolova, K.I. Krastev, and B. Kiradjiev: Hyperbolic double-complex numbers, In: Applications of Mathematics in Engineering and Economics, (2009), AIP, Conference Proceedings, 1184, 193 - 198, where hyperbolic bicomplex variables and functions are considered. In this second part are treated the notion of hyperbolic double-complex numbers (variables) and functions. Some basic notion of the hyperbolic double-complex analysis, especially hyperbolic complex CR double-complex system and the hyperbolic doublecomplex Laplacian are considered. The formula for the hyperbolic double-complex exponential function is derived.