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Type 1 Octonion Numbers and Some Symbolic Computations

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Abstract

In this presentation, we will define Type 1 Octonion Numbers. We will examine the algebraic structure and geometric properties of the set of Type 1 Octonion Numbers. We will derive De Moivre formulas. In addition, we will develop symbolic computations in MATLAB to support and illustrate the theoretical results.

***K*eywords** Type 1 Octonion Numbers · De Moivre Formula · Symbolic Computation

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