
Cayley-Dickson loops and their permutation groups

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The Cayley-Dickson loop Q_n is the multiplicative closure of basic elements of the algebra constructed by n applications of the Cayley-Dickson doubling process (the first few examples of such algebras are real numbers, complex numbers, quaternions, octonions, sedenions). We discuss the subloop structure of the Cayley-Dickson loops and describe their automorphism groups, multiplication groups, and inner mapping groups.