

ARITHMETICS IN NUMBER SYSTEMS WITH CUBIC BASE

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Using a base and a finite set of digits, we can express real or complex numbers in many different ways. One possibility, the so-called greedy expansions, was introduced by A. Rényi in 1957. The main advantage of this approach is the fact that they conserve the order of real numbers. However, if we add or multiply the numbers with a finite greedy expansion, i.e., ended with infinitely many zeros, there can appear some additional digits at the end of our expansions. In this talk, we will focus on the length of this extension, especially for the case of cubic bases.