Marco Abrate, Fibonacci sequences of Quaternions, Fibonacci Quart. 46/47 (2008/2009), no. 4, 356–365.

## Abstract

In this paper Fibonacci sequences of quaternions are introduced, generalizing Fibonacci sequences over commutative rings, and properties of such sequences are investigated. In particular we are concerned with two kinds of Fibonacci sequences of generalized quaternions over finite fields  $\mathbb{F}_p$ , with p an odd prime, and their periods.