1163-11-408 **Paula Maria Machado Cruz Catarino*** (`pcatarin@utad.pt`), Department of Mathematics, School of Science and Technology, University of Tras-os-Montes e Alto Douro, 5001-801 Vila Real, Portugal. *Sequences of quaternions: A summary on my recent research journey.*

A recurrence relation is a "mathematical technique" which allows us to define sequences, sets, even operations or algorithms, from particular cases to general cases. When we use this "technique", it is important to have attention, firstly, at the initial condition(s) - which must be known - and, on the other hand, the "recurrence equation" - which is not more than the rule that will calculate the next terms in the light of predecessors. In this talk, we introduce some special sequences whose terms are quaternions defined by a recurrence relation, presenting some of its properties, generating function and generating matrix. (Received September 05, 2020)