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An equation is called Ulam stable if for every approximate solution of it there exists an exact solution near it. We present some results on Ulam stability for some linear difference equations.

In a Banach space X the linear difference equation with constant coefficients

$$x_{n+p} = a_1 x_{n+p-1} + \dots + a_p x_n,$$

is Ulam stable if and only if all the roots of the characteristic equation are not situated on the unit circle. In this talk, we present some stability results and the best Ulam constant for this equation.