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**Existence of asymptotically periodic solutions of scalar Volterra difference equations.** (English) [Zbl 1212.39020](#)

Tatra Mt. Math. Publ. 43, 51-61 (2009).

The existence of asymptotically periodic solutions of a scalar Volterra difference equation is discussed by using Schauder's fixed point theorem. In addition, a concrete example is illustrated to show the usefulness of the main theorem. Moreover, sufficient conditions for the nonexistence of such solutions are given.

Reviewer: Tetsuo Furumochi (Matsue)

**MSC:**

[39A23](#) Periodic solutions of difference equations

[39A10](#) Additive difference equations

[39A22](#) Growth, boundedness, comparison of solutions to difference equations

Cited in **9** Documents

**Keywords:**

asymptotically periodic solution; asymptotic behavior of solutions; Volterra difference equation