Abstract

The logistic map $rx(1-x)$ was given by the Belgian mathematician Pierre Francois Verhulst around 1845 and worked as basic model to study the discrete dynamical system. The behavior of logistic map has been already studied in orbits of one-step, two-step and three-step iterative procedures and it has been established that the logistic map is convergent for larger values of $r$ for two-step and three-step iteration methods. In this paper, an attempt have been made to study the convergence of logistic map in Noor orbit, which is a four-step iterative procedure.

References

R. L. Devaney, A First Course In Chaotic Dynamical Systems: Theory And Experiment, Addison-Wesley, MA, 1992. MR1202237
- M. Rani and S. Goel, I-Superior approach to study the stability of logistic map, International conf. on Mec. And Elec. Tech. (ICMT 2010), IEEE.
2007. 10. 046.

Index Terms

Computer Science
Applied Mathematics

Keywords

Logistic Map  Picard Orbit  Noor Orbit