

International Workshop on Dynamical Systems and Applications (IWDSA 2019)

*In Memory of Prof. Dr. Aydın Tiryaki*

Gazi University, Ankara, Turkey, 3-4 May 2019

## For the Bernstein type max-product operators iterations

M. Orkcu<sup>1</sup>, F.B. Hatipoglu

<sup>1</sup> *Gazi University, Ankara, Turkey, medihaakcay@gazi.edu.tr*

<sup>2</sup> *Gazi University, Ankara, Turkey, fatmabusrakurt@gmail.com*

### Abstract

In this talk, we consider fixed points and iterates for the Bernstein type max-product operators. We study the convergence of the iterates of operators. Some approximation properties are compared with the iterates of Bernstein polynomials.

**Key Words:** Iterates, Max-product operators, Bernstein polynomials.

### References

- [1] O. Agratini, On some Bernstein type operators: iterates and generalizations, East J. Approx., 9 (2003), 415-426.
- [2] O. Agratini, I.A. Rus, Iterates of a class of discrete linear operators via contraction principle, Comment. Math. Univ. Carolin., 44 (2003), 555-563.
- [3] B. Bede, L. Coroianu, S.G. Gal, Approximation and shape preserving properties of the Bernstein operator of max-product kind, Intern. J. Math. and Math. Sci., (2009), Article ID 590589, 1-26, doi:10.1155/2009/590589.
- [4] M. Balaj, L. Coroianu, S.G. Gal, S. Muresan, Iterations and fixed points for the Bernstein max-product operator, Fixed Point Theory (Cluj), 14 (2013), 39-52.