

1172-47-301

Marat V. Markin* (mmarkin@csufresno.edu), Department of Mathematics, California State University, Fresno, 5245 N. Backer Avenue, M/S PB 108, Fresno, CA 93740-8001. *On the Chaoticity of Derivatives*. Preliminary report.

We introduce a general sufficient condition for linear chaos and thereby show that the n th derivative with maximal domain is a chaotic operator in the spaces $C[a, b]$ and $L_p(a, b)$ ($-\infty < a < b < \infty$, $1 \leq p < \infty$) for each $n \in \mathbb{N}$. (Received August 30, 2021)