1145-46-987   **Florin Catrina*** (`catrinaf@stjohns.edu`) and **Mikhail I Ostrovskii**. *Nowhere differentiable Lipschitz maps of* $[0,1]$ *into* $L_1[0,1]$.

We construct examples of Lipschitz maps F from $[0,1] \subset \mathbb{R}$ into $L_1[0,1]$ which are nowhere differentiable. The novelty of these constructions lies in the fact that for any $t \in [0,1]$, the image $F(t) \in L_1[0,1]$ is arbitrarily smooth. (Received September 18, 2018)