1125-32-306   **Leah Buck** and **Kelly Emmrich*** (`emmrich.kelly@uwlax.edu`), Department of Mathematics and Statistics, University of Wisconsin, La Crosse, 1725 State St., La Crosse, WI 54601, and **Tamas Forgacs**. *Sufficient Conditions for a Linear Operator on $\mathbb{R}[x]$ to be Monotone.* Preliminary report.

We demonstrate that being a hyperbolicity preserver does not imply monotonicity for infinite order differential operators on $\mathbb{R}[x]$, thereby settling a recent conjecture in the negative. We also give several conditions, some necessary, some sufficient, for such operators to be monotone. (Received August 25, 2016)