

SYNNATZSCHKE'S THEOREM FOR POLYNOMIALS

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ABSTRACT. For a regular linear operator, T , on a Banach lattice, Synnatzschke's Theorem addresses the question of when $|T'| = |T|'$. In this talk we will consider a non-linear version of Synnatzschke's Theorem. Namely, we will show that for a regular polynomial on a Banach lattice, under certain conditions, absolute value commutes with the Aron-Berner extension. This will allow us to determine when the regular norm for polynomials is preserved by the Aron-Berner extension. (This is joint work with C. Boyd, University College Dublin, and R. Ryan, National University of Ireland Galway.)