1113-47-257 Jessica E. Stovall* (jstovall@una.edu). A Linear Map Associated with a Non-linear Operator on a Banach Lattice.

A Dedekind complete Banach lattice E with a quasi-interior point e is lattice isomorphic to a space of continuous, extended real-valued functions defined on a compact Hausdorff space X. Orthogonally additive, continuous, monotonic, and subhomogeneous nonlinear functionals on E are analyzed in this talk. Though these maps are not linear, a complete measure on X related to a nonlinear operator T is constructed and thus an associated linear map L is found. (Received August 24, 2015)