1145-VN-2616   **Erin E. Tripp*** (`eetripp@syr.edu`). *Structured Sparsity Promoting Functions.*

Motivated by the minimax concave penalty, we introduce a simple scheme to construct structured semiconvex sparsity promoting functions from convex sparsity promoting functions and their Moreau envelopes. We provide sparsity guarantees for the general family of functions and further study the thresholding behavior of the proximity operators of piecewise quadratic functions, indicator functions, and their sums. (Received September 25, 2018)