$\textbf{SEDI BARTZ}, \ University \ of \ Massachusetts \ Lowell$

Maximal monotonicity in multi-marginal settings

The relatively new concept of multi-marginal monotonicity opens the door to several natural questions. Consequently, we are led to the possibility of embedding classical monotone operator theory and convex analysis in corresponding multi-marginal theories. In particular, thus far, the most basic issues of maximal monotonicity have not been attended. We review possible generalizations of maximal monotonicity results, some resolutions, work in progress and open questions.