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Isao Yamada* (isao@sp.ce.titech.ac.jp), Ookayama 2-12-1-S3-60, Meguro-ku, Tokyo, 152-8550, Japan, and **Masao Yamagishi** (myamagi@sp.ce.titech.ac.jp), Ookayama 2-12-1-S3-60, Meguro-ku, Tokyo, 152-8550, Japan. *A pair of fixed point strategies with proximal splitting operators for unified applications to certain inverse problems in data science.*

In this talk, we demonstrate how the fixed point theoretic strategies can be enhanced with the proximal splitting operators for powerful applications to increasingly complex inverse problems desired to be tackled in data science. As such typical examples, we introduce a pair of key ideas established recently for (i) the hierarchical convex optimization with the hybrid steepest descent method, and for (ii) the Linearly involved Generalized Moreau Enhanced (LiGME) models designed specially to utilize nonconvex penalties in wide range of the sparsity-rank-aware signal processing. (Received September 14, 2020)