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Jiahua Jiang* (jiahua@vt.edu), **Julianne Chung** (jmchung@vt.edu) and **Eric de Sturler** (sturler@vt.edu). *Truncation and Recycling Methods for Lanczos Bidiagonalization and Hybrid Regularization.*

Krylov methods for inverse problems have the nice property that regularization can be decided dynamically. However, this typically requires that the entire Krylov space is kept in memory, which is problematic for large problems that do not converge quickly. We propose strategies for truncating the search space while maintaining the possibility of dynamic regularization (for various regularization methods). In addition, these strategies have advantages if a sequence of related regularized solves is required. (Received September 07, 2018)