

1. GCR;
2. ORTHODIR;
3. Generalized Simpler Approach:
  - (a) RB-SGMRES: Using  $Z_n = \tilde{R}_n$ ;
  - (b) Simpler GMRES: Using  $Z_n = V_n$ ;
4. Generalized Update Approach:
  - (a) GMRESR: Using  $Z_n = R_n$  (equivalent to original GCR);
  - (b) UNNAMED?: Using  $Z_n = \tilde{R}_n$  (is treated in paper);
  - (c)  $A^T A$ -variant GMRES: Using  $Z_n = V_n$  (up to normalization equivalent to ORTHODIR);