

VBM Decoupled aggregation

- ✓ Embarrassingly parallel,
- ✓ Good results with discretized scalar PDEs on a limited number of cores,
- ✗ May produce non-uniform aggregates,
- ✗ Needs user inputted parameters for strength of connection,
- ✗ Issues with anisotropic problems.

Matching-based aggregation

- ✓ Independent of any heuristics or a priori information on the *near kernel* of A ,
- ✓ Builds coarse matrices which are well-balanced among parallel processes,
- ✓ No need for special treatment of process-boundary dofs,
- ✓ Works with discretized system of PDEs with arbitrary ordering,
- ✗ May have problems with *highly anisotropic* problems.