

Texas Tech University. Applied Mathematics Seminar.

**Don't call me Schurly. A look at Schur
complement preconditioners for some
incompressible flow problems**

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Room: MATH 014. Time: 4:00pm.

ABSTRACT. Many successful block preconditioners for Navier-Stokes discretizations require an approximation to the Schur complement as a sub-process. However, the Schur complement is itself a nice operator, and iterative methods may be applied directly to it. We will explore whether or not this is a good idea in terms of theory and practice, and will also look at some extensions to coupled fluid/temperature problems.