

Preconditioning mixed finite elements for incompressible flow

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The Stokes and incompressible Navier-Stokes problems present interesting and important examples with respectively symmetric and non-symmetric saddle-point structure. In this talk we will discuss block preconditioning and iterative solution of the discrete linear(ised) systems which arise.

In particular we will describe and demonstrate general preconditioned iterative approaches which yield highly effective and efficient solvers for large scale applications.

References:

[1] <http://web.comlab.ox.ac.uk/oucl/people/andy.wathen.html>

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