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Large-Scale Modal Analysis in Structural Dynamics

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My presentation discusses the eigenvalue problem in structural dynamics. In particular, my goal will be to discuss recent work on scalable eigensolvers that can be used on large-scale problems arising from 3D FEM discretizations. These solvers include gradient methods such as LOBPCG, (Block)DACG, BRQMIN and block implementations of inexact Newton methods such as Jacobi-Davidson and Davidson.