

# Computing Tight Bounds on Extreme Eigenvalues of Symmetric Matrices

by

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It is useful to compute sharp bounds on extreme eigenvalues of symmetric matrices because it becomes essentially important (and frequently ineludible) in verified numerical computations, e.g. for solutions of linear and nonlinear systems. In this talk, an algorithm for computing tight bounds for the extreme eigenvalues is developed for symmetric matrices. Numerical results are presented showing the performance of the proposed algorithm.