# OPTIMAL GERSGORIN-STYLE ESTIMATION OF THE MODULUS OF SOME EIGENVALUES

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This paper is a continuation of the work "Optimal Gersgorin-Style Estimation of Extremal Singular Values" (by Charles R. Johnson, Tomasz Szulc and Dominika Wojtera-Tyrakowska). Now our goal is to describe the best possible estimates for both the spectral radius and, in nonsingular case, the smallest (in the modulus) eigenvalue based on two types of Gersgorin information. In this work we also estimate modulus of determinant of matrices from some particular sets. The estimates should treat all matrices related to one of the mentioned types of information or all matrices related to the other type equally.