This book combined with the book on the same subject by Siljak [11] which is also just published and which presents several specific applications of large scale systems to real problems, should form a welcome addition to the subject and help stimulate further work in this new and exciting field.

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Linear representations of finite groups, by Jean-Pierre Serre, Graduate Texts in Mathematics, vol. 42, Springer-Verlag, New York, Heidelberg, Berlin, 1977, x + 170 pp., $12.80.

As one so often discovers in tracing the history of a beautiful mathematical idea, we have Gauss to thank for pointing the way towards the representation theory of finite groups. In his discussion of class groups of even binary quadratic forms of given discriminant over the integers, he attempted to