ential inequalities in stability considerations, theorems on the ultimate boundedness of solutions and a concept they introduce called "practical" stability which fits more closely the requirements arising in technical applications than the usual notion of stability. This point is illustrated on van der Pol's equation with a small perturbation term.

Mathematicians may object to a few statements such as the definition of a closed set as the outside of some open set (p. 19). In the reviewer's opinion these are unfortunate attempts to please the potential reader by keeping the mathematical details to a minimum. Such statements could have been avoided without detracting from the appeal this book will unquestionably have with the audience for which it is primarily intended.

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*Die innere Geometrie der metrischen Räume.* By Willi Rinow. Springer, Berlin, 1961. 16+520 pp. DM 83.

The intrinsic geometry of metric spaces studies their invariants under isometries. Its history dates from Gauss' Theorema Egregium, and it developed in the nineteenth century under Riemann, Helmholtz, Lie, and Klein. In this century intrinsic *differential* geometry has been pursued with great vigor, quite apart from the larger context. In fact, despite great successes in general metric geometry achieved in the past thirty years, mathematical fashion has all but ignored it as a bona fide field for research.

Recently, however, the climate has begun to change. Interest in differential geometry in the large has started many a mathematician studying intrinsic metric geometry. But such a study is made difficult by the scarcity of books on the subject. Until the present volume appeared, there were only three in the field: A. D. Aleksandrov's, *Intrinsic geometry of convex surfaces* (Moscow, 1948), L. M. Blumenthal's, *Theory and applications of distance geometry* (Oxford, 1953), and H. Busemann's, *Geometry of geodesics* (New York, 1955).[1] Since these treat restricted aspects of the whole subject, some survey which could help describe and define the field was clearly called for.

Rinow's book apparently was planned as just such a survey. However, as he states in the introduction, the lack of uniformity in assumptions and definitions among writers in the field soon made it

[1] A predecessor of Busemann's book, his monograph, *Metric methods in Finsler spaces and in the foundations of geometry* (Princeton, 1942), should also be mentioned.