BOOK REVIEWS

as has been done for the classical three-body problem. Maybe it has been done somewhere.

The author is on less firm ground in the other sections on applications but it is still good reading. However, a statement as on the top of p. 153 "Our remarks apply with only obvious simple changes" (from the integers to the real line) shows some naiveté and includes three words (only, obvious, simple) which every mathematician knows may be cause for grave concern. On the other hand Mackey is clearly aware (in this situation) of the difficulties involved when natural orderings are not apparent. Perhaps it should be noted that the references given here to the probability literature are very incomplete.

To summarize, this is an extremely good book, written by a mathematician who is also a scientist and who is willing to make subjective statements to keep the theory alive and growing. It fills the bill in our current battles to revive the philosophy of mathematics as a part of a general scientific consciousness. It even passes the additional test of stating clearly certain open questions which remain in the theory and in the larger scientific investigations on which the theory may bear.

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Nonlinear mappings of monotone type, by Dan Pascali and Silviu Sburlan, Sythoff & Noordhoff, Alphen aan den Rijn, The Netherlands, 1978, x + 342 pp., \$43.00.

In the study of nonlinear problems much use is made of compactness arguments. Particularly since the work of Leray and Schauder [5], the compact operators have been widely used in this study and new applications