

Despite the high quality of research material, the book at times suffers from some lapses. For example, a reader will often come across sentences like "... admits completing web which elements are star-shaped ..." (p. 49, Proposition IV). Certainly an English reader would prefer "... the elements of which ..." instead of "... which elements ...". Also some brevities (intentional or otherwise) are awkward e.g. the frequent usage of " T is continuous of E into F " will be more acceptable to an English-hearing ear if it is either " T is a continuous map of E into F " or " T is continuous from E into F ". Also, the year of reference [30] is incorrect. Nonetheless, the monograph is a welcome addition to the mathematics literature.

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BULLETIN (New Series) OF THE
 AMERICAN MATHEMATICAL SOCIETY
 Volume 1, Number 3, May 1979
 © 1979 American Mathematical Society
 0002-9904/79/0000-0206/\$01.75

Solutions of ill posed problems, by A. N. Tikhonov and V. Y. Arsenin (F. John, Translation Editor) V. H. Winston and Sons (distributed by Wiley, New York), 1977, xiii + 258 pp., \$ 19.75.

The mathematical investigation of ill posed or improperly posed problems in mathematics, mathematical physics and engineering is probably one of the least understood and most misunderstood and maligned endeavors of our science. Ever since the appearance of Hadamard's famous example of a nonwell posed problem [4], the Cauchy problem for the Laplace equation, some mathematicians have regarded the study of such problems as a waste of intellectual effort. There are two or three reasons for this attitude. First of all, what possible physical interest could there be in problems for which existence, uniqueness or perhaps continuous dependence failed? Hadamard himself remarked "But it is remarkable, on the other hand, that a sure guide is found in physical interpretation: an analytic problem always being correctly set ... when it is the translation of some mechanical or physical question." Another justification for the lack of interest in such problems is given by Courant [2]. "Unfortunately little mathematical progress has been