

of interest to a wide variety of specialists in applied mathematics and engineering and should be on the bookshelf of anyone interested in ill posed problems. There are numerous examples and illustrations. The translator has taken pains to insure that the English reads smoothly.

#### REFERENCES

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*Catastrophe theory and its applications*, by Tim Poston and Ian Stewart, Surveys and Reference Works in Mathematics, Pitman, London, 1978, xviii + 491 pp., \$50.00.

What mathematical discovery has provoked recent articles in *Scientific American*, *Nature*, *Newsweek*, *Science*, *The New York Times*, *The Times Higher Education Supplement*, *L'Express* and the *New York Review of Books*? What current theory now ranks only behind the weather and old movies as a subject of cocktail conversation between mathematicians and nonmathematicians? Is there any content to this theory which has been described in *Science* as an emperor without clothes? Has all the notoriety been public relations—beginning with the creator's brilliant choice of name? This, for instance, has led *The New York Times* to blunder on its front page article with the headline "Experts Debate the Prediction of Disasters." In short, is this theory really—as *Newsweek* described it—the most important mathematical advance since Newton's invention of the calculus?

The answer to the last question is simply no; however, catastrophe theory does have merit both in mathematics and in applications. How, then does one find out about its successes and why is there a controversy? The answers to these questions are related, but before discussing them one point should be made. To my knowledge no one has suggested that the mathematics behind catastrophe theory is anything less than superb.