everybody although with an emphasis on problems involving jets and cavities. Troianiello, on the other hand, has a more focused point of view in a very different direction. He develops the classical theory of elliptic differential equations and regularity of their solutions in the framework of variational inequalities. A lot of high powered technical machinery is used, and this book is the most theoretical of those listed here. Rodrigues points out in the preface that he is trying for a modern version of Duvaut and Lions; he is more concerned with physical motivation than with development of theory. Theorems on elliptic differential equations are quoted as needed. The book succeeds at emphasizing the physical point of view without disregarding mathematical rigor. Some of the models are described rather sketchily, though.

In addition to the applications, Rodrigues spends more time on the study of stability of free boundaries then the other authors listed.

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BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 21, Number 2, October 1989

0273-0979/89 $1.00 + $.25 per page

Nest algebras, by Kenneth R. Davidson. Pitman Research Notes in Mathematical Sciences, vol. 191, Longman Scientific and Technical, Harlow, 1988, 411 pp., $74.95. ISBN 0-582-01993-1

Nest algebras were introduced by J. R. Ringrose in 1965 shortly after studies by R. V. Kadison and I. M. Singer of a related class of operator algebras, and in the last twenty-five years the subject has matured to the extent that they form a moderately well-understood class in the category of non-self-adjoint operator algebras. Most notably Ringrose's similarity problem has been resolved, finally, in a curious way requiring a deep and unexpected excursion into the analysis of quasitriangular algebras. Moreover there are now multiple points of contact with other areas of operator theory and many intriguing basic problems remain unsettled.

"Non-self-adjoint." This is, unfortunately, a rather inelegant adjective, a kind of apologetic antidefinition, but it may be seen less in the coming