

Further, Kleinberg does not mention the problem of computing  $\delta_n^1$ , a problem which has motivated a great deal of the theory to which these notes contribute. As a result of these omissions, the nonexpert who does not simply love the bizarre will find little reason to read past the introduction.

How should one use the book? Curiously, although its natural context is a quite elaborate and sophisticated theory, only in Chapter 2 does the book require more than the basics of set theory. Nevertheless, the nonexpert who wants to learn something of the set theory of  $L(\mathbf{R})$  assuming  $\text{AD}^{L(\mathbf{R})}$  would be much better advised to start elsewhere, perhaps by reading [2], [3], [4] (in that order). He will be rewarded with a broader view of this field. On the other hand, the expert in the field will find these notes a useful and well-written reference on one of its aspects.

### REFERENCES

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2. A. S. Kechris and Y. N. Moschovakis, *Notes on the theory of scales*, in *Seminaire Cabal 1976–1977*, *Lecture Notes in Math.*, vol. 689, Springer-Verlag, Berlin and New York (to appear).
3. A. S. Kechris, *AD and projective ordinals*, in *Seminaire Cabal 1976–1977*, *Lecture Notes in Math.*, vol. 689, Springer-Verlag, Berlin and New York (to appear).
4. R. M. Solovay, *A  $\Delta_1^1$  coding of the subsets of  $\omega_\omega$* , in *Seminaire Cabal 1976–1977*, *Lecture Notes in Math.*, vol. 689, Springer-Verlag, Berlin and New York (to appear).

JOHN STEEL

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*Several complex variables*, by H. Grauert and K. Fritzsche, *Graduate Texts in Math.*, vol. 38, Springer-Verlag, New York, Heidelberg, Berlin, 1976, viii + 206 pp., \$18.80.

There is no shortage of introductory texts and treatises in several complex variables. Since the subject borrows methods from diverse areas of mathematics such as algebraic geometry, functional analysis, p.d.e., differential geometry and topology, and thus partially overlaps with these areas, it is not surprising that these introductory books cover a wide variety of material from various perspectives. [A listing of some of the recent introductory texts (in English) in several complex variables is given in the references below.] Grauert and Fritzsche's *Several complex variables* is a more or less orthodox introduction to the classical themes of several complex variables arising out of the Oka-Cartan theory. The classical global theory of functions of several complex variables is based on the existence, noted by Hartogs, of domains  $D$  in  $\mathbb{C}^n$  ( $n > 1$ ) such that every holomorphic function on  $D$  can be extended to a larger domain. If on the contrary  $D$  is the natural domain of definition of a holomorphic function, then  $D$  is called a *domain of holomorphy*. The subject received its major impetus from attempts to describe domains of holomorphy. The Cartan-Thullen Theorem characterizes domains of holomorphy as domains  $D$  that are *holomorphically convex*; that is, the hull of any compact subset with respect to the algebra of holomorphic functions on  $D$  is compact.