the complex Monge-Ampère operator. By first studying general capacity set functions, the author focuses attention on the analytic problems that arise in proving important properties of the capacity, such as continuity under decreasing limits of compact sets. The continuity of $(dd^c u)^n$ under bounded, monotone limits of plurisubharmonic functions is proved, as is the equivalence of negligible sets (with respect to plurisubharmonic functions), pluripolar sets, and sets of capacity zero. Other interesting applications are given to the study of the (pluri-) Green function and Siciak's global extremal function, the analogue of the Green function with pole at infinity in one complex variable.

The major shortcoming of the book is that it does not supply any outline or overview of the subject. There should have been some introductory material in each chapter that calls attention to the main results and the direction one takes to prove them. Also, I did not find any strong connection between the last three chapters and the topics discussed in the first nine chapters. A surprising omission in a book on capacities in several complex variables is that there is no mention of some of the most interesting and important new capacities, such as the projective capacities studied by Sibony and Wong and by H. Alexander, and the capacity associated with the "transfinite diameter," studied by Siciak and Zaharjuta. Of course, it is impossible to have everyone's favorite topics in such a short monograph.

Since these notes are lecture notes from courses given by the author, it is perhaps not surprising that there are many typographical errors in them. However, I found no serious errors. All in all, I think this book is a good source for obtaining an introduction to a new and interesting subject.

> B. A. Taylor University of Michigan

BULLETIN (New Series) OF THE AMERICAN MATHEMATICAL SOCIETY Volume 24, Number 1, January 1991 © 1991 American Mathematical Society 0273-0979/91 \$1.00 + \$.25 per page

Computability in analysis and physics, by M. B. Pour-El and J. I. Richards. Perspect. Math. Logic, Springer-Verlag, New York, Berlin, Heidelberg, 206 pp. ISBN 0-387-50035-9

Which processes in analysis and physics preserve computability, and which do not? In order to answer this question, after an