

not corroborated by the titles of papers presented at recent meetings dealing with general relativity—hardly justifies the overkill contained here. One wonders why, for example, there are three articles on the canonical formalism or why one needs four articles devoted in one way or another to supergravity and gauge fields.

A similar question might be raised with regard to the number of articles in Volume 2 devoted to the asymptotic structure of space-time. By and large these are highly technical papers, which will prove especially difficult for the nonspecialist. So too will a number of the purely mathematical contributions to these volumes. This reviewer failed utterly to penetrate the complexities of the articles on local isometric embedding of Riemannian manifolds or the theory of separability of the Hamilton-Jacobi equation. On the other hand, he found the articles on algebraic computing and high-frequency gravitational waves quite readable.

The remaining articles primarily concern mathematical aspects of the theory. Of these, attention should be called to the review article on singularities and horizons. The authors have clearly tried to make this difficult and inherently mathematical subject accessible to the theoretical physicist with a background in general relativity. One wishes that more of the other contributors had made similar efforts. The fact, however, that some of the articles are research rather than review articles might explain these differences in presentation.

Certainly, physicists interested in general relativity will find articles of interest in these two volumes. However, persons not specifically interested in the canonical formalism, quantum gravity or the asymptotic structure of space-time, may not find anything to justify their acquiring the books, especially when they consider the purchase price.

JAMES L. ANDERSON
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Proceedings of the 1979 JINR-CERN School of Physics, Dobogoko, Hungary, September 1979, Vols. I and II. 369, 190 pp. Hungarian Academy of Sciences, Central Research Institute for Physics, Budapest, 1980. (price not stated)

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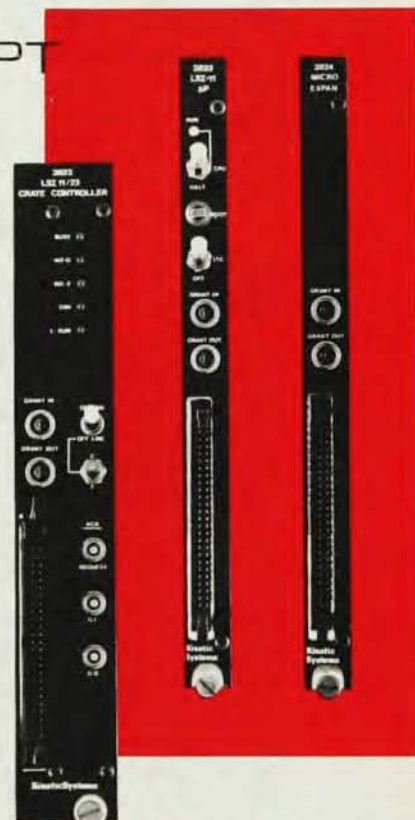
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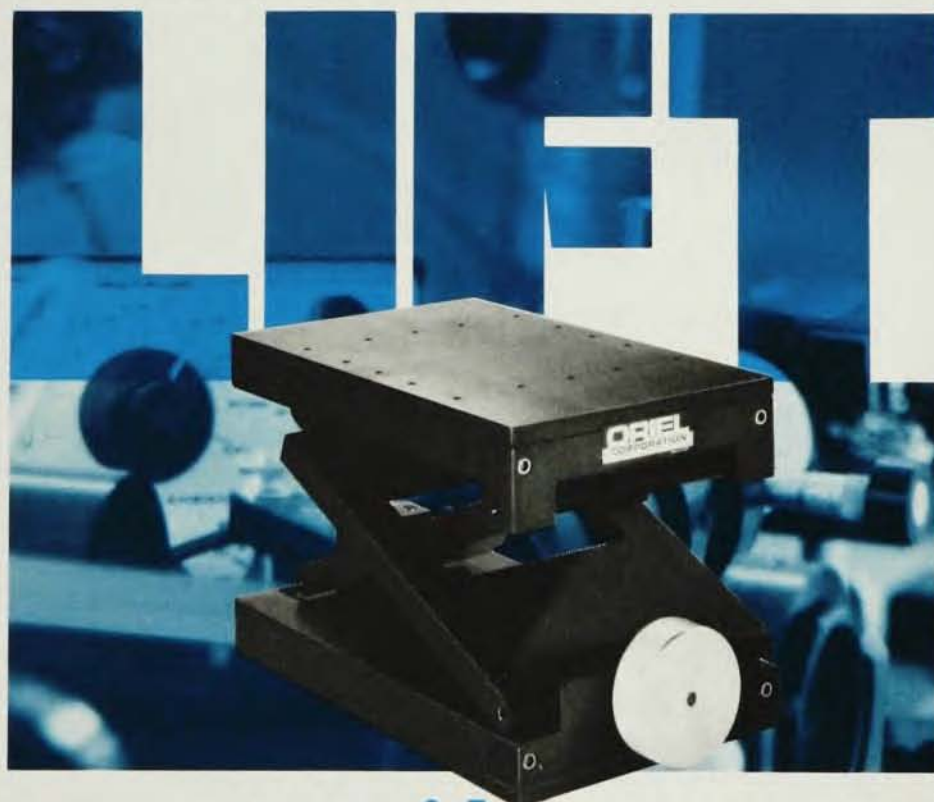
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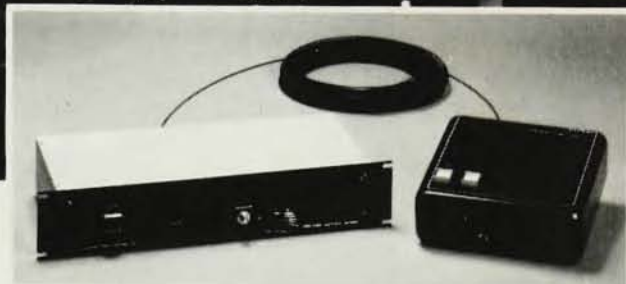
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