

K. B. Wolf, **Integral transforms in science and engineering**, Mathematical Concepts and Methods in Science and Engineering, Vol. 11, Plenum Press, New York and London, 1979, xiv + 489 pp., price \$ 32.50.

This is a book that describes transform techniques with many illustrations from various fields. It is divided into four parts: (i) Finite dimensional vector spaces and the Fourier transform, (ii) Fourier and Bessel series, (iii) Fourier and related integral transforms, (iv) Canonical transforms. The first three parts contain material that can also be found elsewhere (see, for instance, the book on Fourier series and integrals by Dym and McKean), but it is presented here with emphasis on the point of view of a physicist. The material in the last part describes more recent work about a continuum of transforms which includes Fourier transforms but also Bargmann transforms. As the author says: the pace and the tone of the text have been set by the balance of intuition and rigor as practiced in applied mathematics.

H. S. V. de Snoo.

Forthcoming papers

The following papers have been accepted for publication:

1. The flow and heat transfer between a torsionally oscillating and a stationary disk, by N. Dōhara.
2. High Reynolds number flows with closed streamlines, by N. Riley.
3. A boundary integral equation method for a Neumann boundary problem for force-free fields, by R. Kress.
4. Effect of stratification on hydrodynamic pressures on dams, by A. T. Chwang.
5. On the departure of a sphere from contact with a permeable membrane, by A. Nir.
6. The fluid-filled cylindrical membrane container, by C. Y. Wang.
7. Steady flow and static stability of airfoils in extreme ground effect, by E. O. Tuck.