Molecular integrals

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Book Review (continued from p. 276)

some problems in mathematical physics", formulates the Schrödinger equations for a system of particles in a potential field, in such a manner that if we make Planck's constant tend to zero in the equations, then these equations tend to those for classical mechanics. K. A. Bezhanov writes on "The interaction between a shock wave and the free surface of a liquid", and I. I. Nochevkina writes on "Supersonic flow around conical bodies in an ideal liquid at different angles of attack". V. V. Martynyuk's paper on "The division of an algorithm scheme into networks" is concerned with the transformation of computing algorithms into forms which are suitable for automatic programming. I. L. Sobel'man, in "The relation between computing time, stage length and frequency of random machine errors", examines the problem of optimizing the length of the stages into which a program should be divided in order to guard against machine faults.

Next there are three short communications on "A method for partitioning a high order matrix into blocks in order to find its eigenvalues" by V. A. Shishov, "On some infinite systems of equations" by E. G. Deich, and "An approximate method of solution of Schrödinger's equation" by V. B. Uvarov and A. F. Nikiforov. Finally, this issue lists the papers published in the remaining five parts of Volume 1 (1961), which include the Report on ALGOL 60 by Naur et al. Other papers are devoted to numerical solution of polynomials, theory of automata, error analysis in linear algebra, reactor kinetics, automatic programming, aerodynamics, queueing theory, finite-difference techniques for solving differential equations, and many other branches of numerical analysis and mathematical physics.

This translated journal should be a most useful addition to any mathematical library. But if any prospective reader hesitates to pay £50 per year, he is advised to acquire a smattering of the Russian language, buy a good Russian-English mathematical dictionary, and subscribe to the Russian journal at £4. 6s. 0d. per year. G. J. TEE

Correspondence

The Editor, The Computer Journal.

Sir,

A Hardware Representation for ALGOL 60 using Creed Teleprinter Equipment

Regarding the paper by Gerard and Sambles (this *Journal*, Vol. 5, p. 338, 1963) and subsequent correspondence, I am surprised that no one has suggested designing a 5-hole tape code quite specifically for the representation of ALGOL. By using two non-feed characters, $_$ and |, it is possible to have a code that gives printed texts that look like ALGOL, the main restriction being that only one size of letter is available. Such a code has, in fact, been implemented on

conventional teleprinter equipment for R.R.E., Malvern, but as far as I know has not been publicized.

I have yet to be convinced that the advantages of 7- and 8-hole tape are so overwhelming that they justify the considerable price difference between the editing equipment required and that available for 5-hole tape. I suggest that it is worth our while to consider and agree on such a 5-hole code as this gives us the advantage of compatibility of our ALGOL representations and also allows the use of cheaper equipment. I would welcome the views of your readers.

Yours faithfully,

PAUL A. SAMET.

Computation Laboratory, The University, Southampton.

17 June 1963.