Systems on Group Manifolds—Lawrence Markus, A Conjecture on Local Trajectory Equivalence—Courtney Coleman, Forced Oscillations in Second Order Systems with Bounded Nonlinearities—O. Benediktsson and B. A. Fleishman, Uniqueness Theorems for Initial Value Problems—Robert D. Moyer, Existence and Uniqueness of Solutions to the Second Order Boundary Value Problem—Paul B. Bailey, Lawrence F. Shampine, and Paul E. Waltman, An Application of Popov's Method in Network Theory—Vaclav Dolezal, Topologies for Linear Spaces of Nonlinear Differential Equations—Hubert Halkin, On Nonelementary Hyperbolic Fixed Points of Diffeomorphisms—Kuo-Tsai Chen, Nonautonomous Differential Equations as Dynamical Systems—George R. Sell.

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This note presents concise details of an application of the method of "intermediate problems," developed by Weinstein [1], Aronszajn [2], and Bazley [3], to the calculation of the eigenvalues, θ_0, of Hill's equation

$$u'' + \left(\theta_0 + 2 \sum_{j=1}^{p} \theta_j \cos 2jz\right)u = 0$$

for which there exist even periodic solutions of period π corresponding to given values of θ_j $(j \geqq 1)$.

The first N eigenvalues are tabulated, correct to from 11S to 3S (as N and p increase), for the four cases: $\theta_1 = 1, \theta_2 = 0.2, p = 2, N = 6; \theta_1 = 3, \theta_2 = -0.4, p = 2, N = 6; \theta_1 = 1, \theta_2 = 0.2, \theta_3 = 1, p = 3, N = 11$; and $\theta_1 = 1, \theta_2 = 0.2, \theta_3 = 1, \theta_4 = 0.5, \theta_5 = 2.1, \theta_6 = 0.2, \theta_7 = 1, p = 7, N = 15$. In the first two cases good agreement is shown to exist between the decimal approximations found here for the first two eigenvalues and the corresponding 4D values found by Klotter and Kotowski [4] by the method of continued fractions.

J. W. W.

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3. N. W. BAZLEY, "Lower bounds for eigenvalues," *J. Math. Mech.*, v. 10, 1961, pp. 289–307.
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The brilliantly conceived and executed, the most often quoted monograph on difference methods for solving partial differential equations, has been improved upon in this second, completely revised, edition! Here the blending of theoretical analysis and intuitive formulation of methods is ideal and au courant with the current state of the art and science of computing.

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