

Corrigendum

Vol. 30, No. 1 (1979), in the article "Numerical Solution of a Nonlinear Hyperbolic Equation by the Random Choice Method," by Paul Concus and Włodzimierz Proskurowski, pp. 153–166:

The discussion printed in our paper [1] does not identify properly all possible cases for the solution of the Riemann problem

$$\frac{\partial v}{\partial t} + \frac{\partial}{\partial x} f(v) = 0, \quad t > 0, \quad (2)$$

$$v(x, 0) = \begin{cases} u_L, & x \leq 0, \\ u_R, & x > 0 \end{cases} \quad (5)$$

for $f(v)$ having exactly one inflection point $(u_I, f(u_I))$ in the interval of interest and for which $f'(u_I) \geq f'(v) \geq 0$. To complete the description of the solution of (2) and (5) given in Section 3.2 of [1], amend case (Ib) to read:

(Ib) if $a(u_L) < a(u_R)$, the state $v = u_L$ is connected to the state $v = u_R$ by an expansion wave when u_I does not lie between u_L and u_R ; when u_I does lie between u_L and u_R the states are connected by a compound expansion wave and shock, according to (IIa) or (IIb).

For the compound wave, solution (6c) and Fig. 5 of [1] apply.

REFERENCES

1. P. CONCUS AND W. PROSKUROWSKI, *J. Comput. Phys.* **30**, 153 (1979).

P. CONCUS
W. PROSKUROWSKI