

Erratum: Discrete Gradients in Discrete Classical Mechanics¹

L. Renna²

Received April 10, 1988

The brackets of equation (25) should read

$$\left(\frac{\partial H_n}{\partial \mathbf{r}_n^{(i)}} \cdot \dot{\mathbf{r}}_n^{(i)} + \frac{\partial H_n}{\partial \mathbf{P}_n^{(i)}} \cdot \dot{\mathbf{P}}_n^{(i)} \right)$$

In equation (34), $\mathbf{r}_{nx} \mathbf{p}_n \cdot \hat{\mathbf{z}}$ should read $\mathbf{r}_n \times \mathbf{p}_n \cdot \hat{\mathbf{z}}$. Equation (35) should be replaced by

$$\frac{\partial L_{n_z}}{\partial \mathbf{r}_n} = \frac{\mathbf{p}_{n+1} + \mathbf{p}_n}{2} \times \hat{\mathbf{z}} \cdot \frac{\partial \mathbf{r}_n}{\partial \mathbf{r}_n} = \frac{\mathbf{p}_{n+1} + \mathbf{p}_n}{2} \times \hat{\mathbf{z}}$$

Equation (36) should be replaced by

$$\frac{\partial L_{n_z}}{\partial \mathbf{p}_n} = \hat{\mathbf{z}} \times \frac{\mathbf{r}_{n+1} + \mathbf{r}_n}{2}$$

These errors do not change any of the conclusions.

¹This paper appeared in the *International Journal of Theoretical Physics* **26**, 685 (1987).

²Dipartimento di Fisica dell' Università-73100 Lecce and Istituto Nazionale di Fisica Nucleare, Sezione di Bari, Italy.