

## ERRATA

### Erratum: “The Hamiltonian structure of a two-dimensional rigid circular cylinder interacting dynamically with $N$ point vortices” [Phys. Fluids 14, 1214 (2002)]

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A few errors appeared in our original manuscript, which we correct below. None of the results in the paper are affected by these changes.

In Fig. 1 on page 1215, a circular arrow around the cylinder CM denoting its angular velocity is missing. On page 1216, Eq. (6) should read

$$\sum \Gamma_k \psi_B(\mathbf{I}_k, \mathbf{V}) = \left\langle \oint_{\partial B} \mathbf{I} \times (\mathbf{n}_b \times (\mathbf{u}_V)_b) ds, \mathbf{V} \right\rangle,$$

where  $\langle \cdot, \cdot \rangle$  is the standard Euclidean inner product on the plane.

There are two small errors in the statement of the Proposition on pages 1216–1217. The set  $B$  in the definition of the phase space on page 1217 should be  $B^N$ , i.e.,  $N$  copies of  $B$ . In the last mathematical term in the statement on page 1217 (just before the Proof begins), there is a plus sign instead of a minus sign in front of the summation of terms denoting the point vortex bracket.

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In the itemized Comments following the Proof on page 1217, there are two small changes. In the first item, the same correction to  $B$  should be applied as in the statement of the Proposition and in the last item the first line after the equations should begin “Using Eq. (A3)...”

Equations (A22) and (A23) on page 1224 should read

$$\oint_{C_R} \mathbf{u}^{(2)} \cdot d\mathbf{s} = -\mathbf{k} \cdot \oint_{C_R} \mathbf{n} \times \mathbf{u}^{(2)} ds = 0,$$

$$\oint_{C_R} \mathbf{u}^{(3)} \cdot d\mathbf{s} = -\mathbf{k} \cdot \oint_{C_R} \mathbf{n} \times \mathbf{u}^{(3)} ds = 0,$$

and the line below Eq. (A24) is “In the irrotational region traversed by  $C_R$ , Eq. (A18)...”

There is no negative sign in front of the last term in Eq. (A25) but there is a negative sign in front of the first term on the right hand side of the next equation. Similarly, there is a negative sign in front of the terms on the right hand sides of both of Eqs. (A41) and (A42). Finally, the last two terms in Eq. (A50) are

$$\mathbf{V}(t) \cdot \boldsymbol{\eta}(\mathbf{I}_k) + \Omega(t) \kappa(\mathbf{I}_k).$$