

# List of Errata in Papers by Robert J Whittaker

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## Confirmed Errors

- **Steady Axisymmetric Creeping Plumes above a Planar Boundary. Part I: A Point Source**

R. J. WHITTAKER & J. R. LISTER (2006). *J. Fluid Mech.*, **567**, 361–378.

- Equation (3.18) should read

$$\int_0^\infty (g_0 f_1' + g_1 f_0') d\xi = 0.$$

(The right-hand side should be 0 not 1.)

- In the third line of section 4.3, in place of “ $r/z \rightarrow 0$ ”, read “ $s/z \rightarrow 0$ ”.

- **A Rational Derivation of a Tube Law from Shell Theory**

WHITTAKER *et. al.* (2010). *Q. J. Math. Mech.*, **63** (4), 465–496.

- In equation (3.12a) the term with “ $+\nu$ ” should be “ $-\nu$ ”. The error was only in that equation, and (3.13c) is correct as originally printed.
- In equation (B.4c), both of the  $O(\epsilon)$  terms should have minus signs in front of them (only the second one does in the published version). The error does not affect any other equations in the paper.
- In equation (B.12), the factor of  $\delta^2$  in the numerator should be omitted.

- **The Energetics of Flow through a Rapidly Oscillating Tube. Part I: General Theory**

R. J. WHITTAKER, S. L. WATERS, O. E. JENSEN, J. BOYLE & M. HEIL (2010). *J. Fluid Mech.*, **648**, 83–121.

- In equation (8.21), the factor before the integral should be

$$\frac{\lambda^3}{2R^2} \quad \text{instead of} \quad \frac{\lambda^3}{4R^2}.$$

The error only affects that one equation, as (8.23) is correct.

• **Predicting the Onset of High-Frequency Self-Excited Oscillations in Elastic-Walled Tubes**

WHITTAKER *et. al.* (2010). *Proc. Roy. Soc. A*, **466** (2124), 3635–3657.

- In equation (2.11), the expression for  $St$  should read

$$St \equiv \frac{a}{\mathcal{U}T} = \left( \frac{K}{\rho a^3 \ell^2 \mathcal{U}^2} \right)$$

(The factor of  $\ell^2$  was missing from the original.)

- In figure 4(c), the scaling for the graph of  $\tilde{A}$  is incorrect. While the relative magnitudes of the five curves are correct, all should larger by a factor of 1.25.
- Due to a function evaluation error, the analytical lines in the graphs in figures 7(b) and 8 are incorrect. They should be shown in slightly displaced positions; to the left in figure 7(b), and to the right in figure 8. Corrected graphs are shown below:

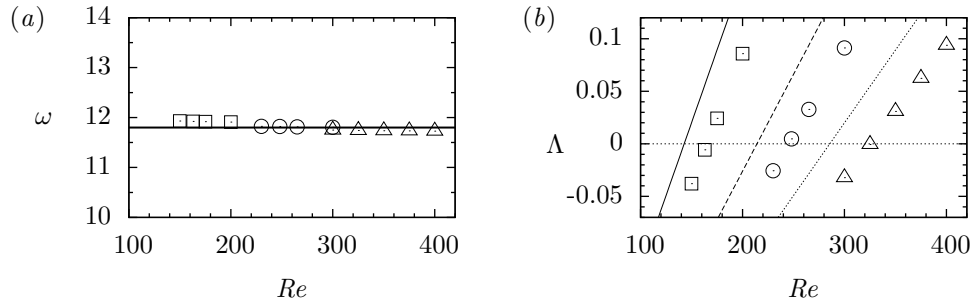


FIGURE 7

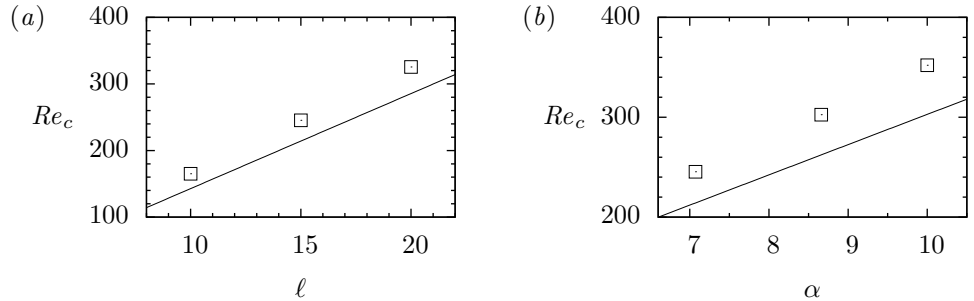


FIGURE 8

• **Stability of a Helicoidal Surface inside a Cylinder with Pinned Diameters**

WHITTAKER & COX (2015). *Q. J. Math. Mech.*, **68** (1), 23–52.

- In the second line of equation (4.21), the first factor of  $(1+k^2)^{1/2}$  should be replaced by  $(1+k^2\xi^2)^{1/2}$ . Following on from this, in the third line of equation (4.21), the  $-h^{(j)}\phi$  term should be outside the parentheses, so that it is not multiplied by the factor of  $(1+k^2)^{1/2}$ . Since the  $h^{(j)}\phi$  terms sum to zero when summed over  $j$ , this error does not affect any of the later equations.