

# *Erratum to: Time-Periodic Solutions of the Navier-Stokes Equations in Unbounded Cylindrical Domains – Leray’s Problem for Periodic Flows*

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Equation (32) in the proof of Theorem 3 is incorrect. A correction can be done as follows. In going from equation (30) to equation (32), replace the test function  $\phi$  by  $w_l$ ,  $l = 1, \dots, m$ , (as opposed to  $\lambda_l w_l$ ). Further, in equation (32), replace (only on the left-hand side)  $k$  by  $k \lambda_l^{-1}$ . Finally, in the definition of the matrix  $\mathcal{M}$  given in the original paper, namely,

$$\mathcal{M} = \begin{bmatrix} M & kI \\ -kI & M \end{bmatrix}$$

replace the matrices  $kI$  by the diagonal matrix  $K = k \operatorname{diag} [\lambda_1^{-1}, \dots, \lambda_m^{-1}]$ . The proof then follows as in the original paper. The statement of the theorem remains unchanged.

We use this occasion to correct a few misprints. In equation (20), page 308, the last symbol  $\chi$  should be replaced by  $A \chi$ . On page 309 the real function  $\alpha$  should satisfy not only  $\alpha(a) = 0$  but also  $\alpha(b) = 1$ . In the second term on the right hand side of equation (27),  $(b - a)$  should be replaced by  $(b - a)^2$  and  $u(t)$  by  $u'(t)$ . Finally, in page 310, replace  $\gamma_{ij} = \delta_{ij} - (w_j, e)(e, w_l)$  by  $\gamma_{jl} = \delta_{jl} - (w_j, e)(e, w_l)$ .

The author regrets the inconvenience.

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