Bull. Malays. Math. Sci. Soc. (2022) 45:2473–2474
https://doi.org/10.1007/s40840-022-01372-3

BULLETIN *of the*
MALAYSIAN MATHEMATICAL
SCIENCES SOCIETY
http://www.springer.com/mathematics/journal/40840

CORRECTION

Correction to: MHD Flow Through a Perturbed Channel Filled with a Porous Medium

Eduard Marušić–Paloka[1] · **Igor Pažanin**[1] · **Marko Radulović**[1]

Published online: 12 September 2022

Correction to: Bull. Malays. Math. Sci. Soc. https://doi.org/10.1007/s40840-022-01356-3

In this article Equation 4.22 was incorrect. The Equation should have appeared as shown below. The original article has been corrected.

$$\left|\int_\Omega \nabla \mathbf{R}^\varepsilon \nabla \mathbf{w}^\varepsilon\right| \le ||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$\varepsilon\left|\int_\Omega 2h\frac{\partial \mathbf{R}^\varepsilon}{\partial z}\frac{\partial \mathbf{w}^\varepsilon}{\partial z}\right| \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$\varepsilon\left|\int_\Omega 2h'\frac{\partial \mathbf{R}^\varepsilon}{\partial x}\mathbf{w}^\varepsilon\right| \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$\varepsilon\left|\int_\Omega 2h'z\frac{\partial \mathbf{R}^\varepsilon}{\partial x}\frac{\partial \mathbf{w}^\varepsilon}{\partial z}\right| \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$\varepsilon\left|\int_\Omega zh''\frac{\partial \mathbf{R}^\varepsilon}{\partial z}\mathbf{w}^\varepsilon\right| \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C\varepsilon||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$k^2\left|\int_\Omega \mathbf{R}^\varepsilon \mathbf{w}^\varepsilon\right| \le C||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

$$M^2\left|\int_\Omega R_x^\varepsilon \mathbf{e}_1 \mathbf{w}^\varepsilon\right| \le C||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||\nabla \mathbf{w}^\varepsilon||_{L^2(\Omega)} \le C||\nabla \mathbf{R}^\varepsilon||_{L^2(\Omega)}||r^\varepsilon||_{L^2(\Omega)},$$

The original article can be found online at https://doi.org/10.1007/s40840-022-01356-3.

✉ Marko Radulović
mradul@math.hr

Eduard Marušić–Paloka
emarusic@math.hr

Igor Pažanin
pazanin@math.hr

[1] Department of Mathematics, Faculty of Science, University of Zagreb, Bijenička 30, 10000 Zagreb, Croatia

$$
\begin{aligned}
\varepsilon\left|\int_\Omega zh'r^\varepsilon\frac{\partial \mathbf{w}^\varepsilon}{\partial z}\mathbf{e}_1\right| &\le C\varepsilon||r^\varepsilon||_{L^2(\Omega)}||\nabla\mathbf{w}^\varepsilon||_{L^2(\Omega)}\\
&\le C\varepsilon||r^\varepsilon||^2_{L^2(\Omega)},\\
\varepsilon\left|\int_\Omega h'r^\varepsilon\mathbf{w}^\varepsilon\mathbf{e}_1\right| &\le C\varepsilon||r^\varepsilon||_{L^2(\Omega)}||\nabla\mathbf{w}^\varepsilon||_{L^2(\Omega)}\\
&\le C\varepsilon||r^\varepsilon||^2_{L^2(\Omega)},\\
\varepsilon\left|\int_\Omega h'r^\varepsilon\frac{\partial \mathbf{w}^\varepsilon}{\partial z}\mathbf{e}_2\right| &\le C\varepsilon||r^\varepsilon||_{L^2(\Omega)}||\nabla\mathbf{w}^\varepsilon||_{L^2(\Omega)},\\
&\le C\varepsilon||r^\varepsilon||^2_{L^2(\Omega)},\\
\left|\int_\Omega \mathbf{E}^\varepsilon\mathbf{w}^\varepsilon\right| &\le C||\mathbf{E}||_{L^2(\Omega)}||\nabla\mathbf{w}||_{L^2(\Omega)} \le C\varepsilon^2||r^\varepsilon||_{L^2(\Omega)}.
\end{aligned}
\tag{4.22}
$$