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Corrigendum to “A Semi-Empirical Airfoil Stall Noise Model Based on Surface Pressure Measurements” [Journal of Sound and Vibration, 387 (2017) 127-162]

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In the above-mentioned paper, two model formulae were tuned to fit experimental data of surface pressure spectra measured in various wind tunnels. They correspond to high and low Reynolds number flow scalings, respectively. It turns out that there exist typographical errors in both formulae numbered (9) and (10) in the original paper. There, these formulae read:

$$S_{pp}^+(St_L) = 2.5 \cdot 10^{-5} / (5 \cdot 10^{-6} + St_L^5) \quad (9)$$

$$S_{pp}^-(St_L) = 5 \cdot 10^{-7} / (3 \cdot 10^{-6} + St_L^5) \quad (10)$$

where the numerators are missing the Strouhal number to obtain the desired scaling properties. In other words, the correct formulae are:

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$$S_{pp}^+(St_L) = 2.5 \cdot 10^{-5} \cdot St_L / (5 \cdot 10^{-6} + St_L^5) \quad (9)$$

$$S_{pp}^-(St_L) = 5 \cdot 10^{-7} \cdot St_L / (3 \cdot 10^{-6} + St_L^5) \quad (10)$$

A typographical error in the equation p.145 was also discovered. The function Γ_2 (Fourier transform in the spanwise direction of the coherence function γ_2) reading as:

$$\Gamma_2(\omega, k_2) = \frac{c_y(\omega)}{\pi (c_y(\omega)^2 + \omega^2)}$$

should be in fact a function of k_2 (wavenumber corresponding to the spanwise direction), that is:

$$\Gamma_2(\omega, k_2) = \frac{c_y(\omega)}{\pi (c_y(\omega)^2 + k_2^2)}$$

Finally, a further typographical error must be corrected in the original manuscript. The cross-correlation function should read ‘ $\rho_{x-x_{\text{ref}}}$ ’ instead of ‘ $\rho_{x-x_{\text{ref}}}$ ’ in p. 132, 136 and 137.

All subsequent derivations, figures and conclusions of the paper are unaffected by these typographical errors.

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