Corrigendum to

A Wave Equation with Fractional Damping


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Corrigendum

In formula (7) of this paper what was meant is

\[ G_{\alpha,\beta}(t) = e^{\beta t} \int_t^{+\infty} e^{-\beta s} s^{-(3\alpha+2)} ds \]

instead of

\[ G_{\alpha,\beta}(t) = e^{\beta t} \int_t^{+\infty} e^{-\beta s} s^{-(2\alpha+3)} ds. \]

The rest of the proof remains correct and very few minor changes occur only in the constants. However, the convergence of the integral in \( G(0) \) will restrict the range of \( \alpha \) to \(-1 < \alpha < \frac{\alpha}{3} \) instead of \(-1 < \alpha < 0 \). To overcome this restriction one can do better by choosing

\[ G_{\alpha,\beta}(t) = e^{\beta t} \int_t^{+\infty} e^{-\beta s} s^{-(\alpha+1)} ds \]

and writing \( \alpha + 1 = \frac{\alpha+1}{2} + \frac{\alpha+1}{2} \) in page 613.

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