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FORCED OSCILLATION OF FRACTIONAL PARTIAL DIFFERENTIAL EQUATIONS WITH DAMPING TERM

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Abstract. In this paper, the forced oscillation of fractional partial differential equations of the form

$$D_{+,t}^{1+\alpha}u(x,t)+p(t)D_{+,t}^{\alpha}u(x,t) = a(t)\Delta u(x,t)+\sum_{i=1}^{m}a_i(t)\Delta u(x,t-\tau_i) -q(x,t)\int_0^t (t-\xi)^{-\alpha}u(x,\xi)d\xi+f(x,t),\ (x,t)\in\Omega\times R_+\equiv G$$

are investigated, and some examples are given to illustrate the useful of our results.

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