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Title: Asymptotic stability of differential equations with several delays

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The linear scalar differential equation with several delays

$$x'(t) = - \sum_{i=1}^N b_i(t)x(t - \tau_i(t))$$

is investigated, where $b_i(t) \in C(R^+, R)$ and $\tau_i(t) \in C(R^+, R^+)$ for $i = 1, 2, \dots, N$. Using fixed point theory, some new conditions for asymptotic stability of the zero solution are established. For $N = 1$, our theory improves the results in the earlier publications. For $N = 2$, two examples, which the results in the literature can not be applied to, are given to show the feasibility and effectiveness of our result.

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