



Linear independence of time-frequency translates of functions with faster than exponential decay

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We establish the linear independence of time-frequency translates for functions f having one sided decay $\lim_{x \rightarrow \infty} |f(x)| e^{cx \log x} = 0$ for all $c > 0$. We also prove such results for functions with faster than exponential decay, i.e., $\lim_{x \rightarrow \infty} |f(x)| e^{cx} = 0$ for all $c > 0$, under some additional restrictions.

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