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How large must the Amplitude of a Pendulum be before the Motions is less than 99.44% pure SHM G.E. HITE, Texas A&M University-Galveston — In most discussions of the motion of a frictionless pendulum, it is assumed or implied that only for small oscillation is the motion close to Simple Harmonic Motion (SHM). A Fourier decomposition of the theoretical motion reveals surprising results.

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