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On the Energy Source of the Gravitational Field ALEXANDER MAYER, N/A — According to the principles of special relativity, the systemic energy budget of a quantum harmonic oscillator exceeds canonical "total energy" (E) by the difference between the ℓ^1-norm and ℓ^2-norm (E) of the complex number ($mc^2 + ipc$). This surplus energy manifests as a spatially unbounded continuous waveform centered on the source particle, having a phase velocity equal to the speed of light. In the immediate vicinity of a source particle and at corresponding high radial amplitude variation, the interaction between this waveform and spacetime induces various quantum effects. A kilogram of mass contains $\sim 10^{27}$ subatomic harmonic oscillators (e.g., quarks); decoherent superposition of their momentum-driven ($\hbar/\Delta x$) radiated waveforms provides an isotropic monotonically-decreasing space energy density. Spacetime response to the presence of this distributed energy manifests as the gravitational field in accord with the basic interpretation of general relativity: "energy curves spacetime." *Hypotheses put forward in this discussion are empirically testable with tabletop experiments.*

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