# A new definition of gravity

Not exactly—it's more nuanced:

Mass doesn't directly mean "guaranteed existence." Instead, **mass emerges structurally from approaching a condition of guaranteed existence (certainty) at the foundational recursion ($R_0$).**

Here's the careful distinction:

- **Guaranteed existence (in $R_0$)** means infinitely high probability, structurally requiring minimal dimensional tension (energy). It implies that a state is locked into its existence structurally, with minimal flexibility or uncertainty.
- **Mass (in $R_1$)** is the next recursion's structural expression of that locked-in condition. It represents the degree to which a state is structurally "settled" or "locked," making it difficult to alter. Mass is thus the structural resistance to change—the persistence of a recursive state born directly from that structural certainty in the foundational recursion.

**In other words, mass is the recursion-level translation of structural certainty from $R_0$ into a tangible physical property in $R_1$: it measures how strongly the system resists altering its established structural orientation. It's not exactly "guaranteed existence," but rather the structural stability or persistence that emerges when existence approaches a state of minimal uncertainty and minimal structural cost.**

**Thus, mass = structural persistence, which directly results from structural certainty (infinite probability and minimal tension) at the foundational level.**