What You Should Know from "Fine Tuned Universe"!

- 1.) What governs the structure of our universe?
- 2.) What is unusual about this?
- 3.) What would happen if the gravitational constant G varied by 1 in 10^{60} parts? (go either way—up or down)
- 4.) To get a feel for how big 10^{60} is, how many cells are in your body? How many seconds have ticked by since creation?
- 5.) The expansion rate of the universe is governed by the cosmological constant? If it changed by 1 in 10^{120} parts would cause the universe to do what?
- 6.) If the "mass to energy" ratio of the early universe were not evenly distriburted to a precision of 1 part in $10^{10^{123}}$, what would happen?
- 7.) What are the three explanations for a finely tuned universe?