

Math vs. Physics no problem here.

No problem with Math. Math is a tool kit; the third or perhaps even the second most important tool for physicist. Even the most 'not even wrong' concept may prove useful somewhere someday. When the present tool kit doesn't have the needed solution one must design or invent a new tool. Or you just wait for someone else to look at the problem in a new way.

Physics is not the problem. Physics is the study of energy and matter and the truth is what it is. A puzzle occurs when a good math solution is stretched beyond physical reason. We are in this time experiencing a very distorted and stretched relationship between physics and math.

“I don't know what's the matter with people: they don't learn by understanding, they learn by some other way — by rote or something. Their knowledge is so fragile!” — **Richard P. Feynman**

Three dimensions seem pretty natural. This is because reality has the characteristic of VOLUME. There is no good reason to think there are more than three dimensions. Time is something totally different and still time is a characteristic related to the volume of space. Properties of space yield physical laws etc. that seem to be identical throughout the universe; and the mechanism that determines the pace of things is what gives us the illusion of time. I discussed the nature and origin of time with my [entry](#) in the first FQXI contest.

The problem is human nature. Our basic nature works both to stymie progress and to hold a steady course. A major factor of human social nature that inhibits our collective search for truth is our willingness even a seeming need to join a crowd and follow a leader, to follow the same path as close as possible, stay in the same rut and even an individual inclination to take the lead position if the opportunity occurs.

The treatment of time as a somewhat different but still as just another dimension is one of these ruts. Freedom from this constraint allows one to consider that time is a characteristic of space, of the vacuum, and a direct consequence of the Higgs field at the limiting size.

Butterflies and caribou follow this mode of progress, mostly with success. But why do scientist at the leading edge follow the pack -- generation after generation?

Intuition, observation and a heap of data suggest that at the most fundamental level; universal reality is simple and highly symmetrical. We can puzzle over these facts or entertain the possibility that there is a primary symmetry in a very basic universal structure.

The deepest collection of ruts in the physics community is along the big bang trail.