Debate Arising from James Webb Space Telescope

Post by “Martin” of August 26, 2022 at 4:32 PM

"... any such data would peel back the singularity itself, would it not?"

Such data would tentatively indicate that the singularity did not happen.

"Why not just accept the epistemological limitations implied by the singularity?"

Because there is no evidence that the singularity did happen. The extrapolation implying the singularity is invalid.

We can use an analogy from gravity:

The simple theory of a mass m at distance r from a mass M results in the potential energy V = -G * M * m / r with G as gravitational constant. This potential energy has a singularity at r = 0, i.e. when the position of both masses is the same.

The more accurate theory takes into account that the masses are not points but objects with an extension. Once mass m dives below the surface of mass M, the potential energy is V = -a + b * M * m * r * r for a homogeneously distributed mass M and constants a and b and has no singularity.

If we eventually figure out the modified laws of physics for the early universe, then we can extrapolate more accurately and will probably not obtain a singularity, similar to the example with m and M.