- (b) Maybe the universe is not infinitely old. Probably not, but then it was either caused or uncaused.
 - If caused, then the series of causes merely continues backward before the universe began; same results.
 - [2] If uncaused, we are actually violating C > E; in fact, we are saying C = 0, E = universe! We will be hard put to justify this assumption at the last judgment!
- (c) Maybe C > E is not true for the universe as a whole.

If not, then it is unlike all causation we know about. [1] So what?

- So you are betting God doesn't exist by going against all the evidence you have.
- [2] Isn't God unlike all causation we know about? No, we know about God-like causation in various evidences of design we see elsewhere in nature.
- [3] How about phenomena like superconductivity? It is true that such phenomena stay in a single state for arbitrarily long periods of time, but they do not transfer energy to something else without losses.

(d) Maybe C > E in just such a way as to lead back to a finite cause.

Mathematically this is just possible, thru the device of <u>asymptotic</u> functions. This would require that:

e gets smaller as t goes further back

in such a way as to produce a finite sum. Example:

sum 1 + 1 + 1 + ... goes to infinity as the number
of items added goes to infinity, an infinite sum.
sum 1 + 1/2 + 1/4 + 1/8 + ... goes to 2 as the
number of items added up goes to infinity, a
finite sum.

Observationally however, we know of no physical laws which behave as growing asymptotic functions, which are what we need here.

(e) How does this prove the God of the Bible? It does not, in the sense that it eliminates all other possible alternatives. This argument only proves that an infinitely powerful cause must have existed infinitely far back in the past. It does not deal with the question of whether this cause still exists, or whether it is personal. The argument is consistent with the picture the Bible provides of God, and it is not consistent with a number of other worldviews that are or have been popular from