## Big Bang was an Ordinary Explosion Jouni S. Puuronen 18.11.2022

## Abstract

We conclude that the simplest explanation for Hubble's law and the cosmic microwave background radiation is that our Milky Way is at some arbitrary location in some ordinary explosion that has a center somewhere, and that has occurred in flat spacetime.



Figure 1: On left is an ordinary explosion with a center somewhere. On right is a view at some arbitrary location using a local coordinate set.

Mainstream scientists have explained that since galaxies in all directions appear to be moving away from our Milky Way, and obey Hubble's law, there would be only two possibilities: Either our Milky Way is at the center of some explosion, or space itself is expanding between the galaxies. Since it is unlikely that we humans would be at the center of something, scientists have then concluded that the expansion of space would be the correct answer. This mainstream reasoning contains a very big mistake. Let's assume that some ordinary explosion, that has some center somewhere, has occured, and that that explosion has the property that the speeds of the particles are proportional to the distances from the center. Then this explosion also has the property that if we choose some arbitrary particle from it, and use a coordinate set whose origin moves along with that chosen particle, then in that coordinate set the neighbor particles in all directions appear to be moving away from the origin again. The proof of this is that if we assume the velocities to come from a formula  $\vec{v} = a\vec{x}$  with some constant a, then  $a(\vec{x} + \Delta \vec{x}) - a\vec{x} = a\Delta \vec{x}$ . Therefore the simplest explanation for Hubble's law is that some ordinary explosion has occured in flat spacetime, and our Milky Way is at some arbitrary location in that explosion.

We should think about the origin of the cosmic microwave background (CMB) radiation too. The explanation of CMB radiation is that there was time, when a space was filled with opaque matter, and then this opaque matter underwent a phase transition into a transparent form. It is a reasonable hypothesis that for a brief moment there were transparent bubbles with opaque walls. These opaque walls radiated black body radiation that then filled the new transparent space. This explanation of CMB radiation does not require the space to be a compact manifold that expands, and it works just fine with ordinary explosion too. We must understand that the ordinary explosion here is not a kind of explosion where independent particles would fly out from one singular point, but instead we are speaking about an explosion where a large volume is filled with opaque matter that expands and undergoes a phase transition into a transparent form during the expansion.



Figure 2: A large volume is filled with opaque matter that expands and then undergoes a phase transition into a transparent form. If the bubble walls emit black body radiation, the new transparent space will be left filled with background radiation. This mechanism works both in compact manifolds that expand and in flat spacetime.