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A theoretical investigation of the origins of atoms and sub-atomic particles CATHERINE DEROW, No Company Provided — It seems the universe was at some very early stage shortwave energy. When the universe cooled some of this became matter, perhaps best thought of as waves confined into quanta. The change into longer wavelengths, if we think of the wavelengths of the particles that make up atoms when emitted as radioactivity, with different properties was presumably brought about by this cooling. In atoms these quantized waves are further confined by electrostatic forces and perhaps other forces. It seems that the electrostatic forces caused the coalescence of neutrons and electrons into atoms, with neutrons being there to keep like charges in the nucleus from like charges i.e., protons, and maybe providing some kind of mass force in the atom. It may be the further cooling of the universe allowed larger atoms than hydrogen to form later as well as having allowed the electrostatic forces to cause the formation of the first atoms. Note the sheer explosive forces present at early stages may have also prevented atom formation and later relative stability allowed this process to take place.

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