

Space's Nuclear Air-Conditioner

Ron Bourgoin

Edgecombe Community College

Rocky Mount, North Carolina 27801

Abstract

We established in a previous paper that an atom entering the extreme cold regions of space has to come to thermal equilibrium with its surroundings. It does this by ingesting its extranuclear electrons into the nucleus. At that point the nucleus evaporates. Since nuclei of atoms lower than iron on the periodic table released heat in the process of their formation, heat has to be absorbed when those nuclei disrupt. Thus the extreme cold of space is maintained by nuclear evaporation.

What is the source of primary cosmic radiation? We cannot find where specifically in space primary cosmic particles come from. Their source seems to be omnidirectional.¹ Their energies make our best particle accelerators look like pea shooters.

In a recent paper we presented the concept of induced ingestion of an atom's extranuclear electrons into the nucleus.² This, we said, was the result of an atom entering the extreme cold regions of space.³ The ingestion of an atom's electrons into the nucleus has to lead to nuclear disruption.⁴

What we should like to do in this paper is discuss how atoms of atomic number lower than iron (Fe) can be disrupted by induced electron ingestion and accomplish thereby two things:

- 1.) cool space;
- 2.) provide high-speed particles.

We see from (2) above that the cosmic particle spectrum can be explained by the evaporation of nuclei everywhere in space.

Electron capture by all protons in the nucleus would of course neutralize all proton charge. It is the existence of proton charge that gives the nucleus its structure, so sudden neutralization of proton charge causes the nucleus to disrupt immediately. We expect sudden shrinkage followed equally suddenly by enormous recoil velocities of nucleons.⁵

One wonders if we should consider nuclear air-conditioners for industry and large commercial concerns on Earth. The suggested fuel, oxygen, could be contained in an iron (Fe) vessel since iron, having the highest binding energy per nucleon, is the least likely element to disrupt.

References

1. Butt, Y., "Beyond the myth of the supernova-remnant origin of cosmic rays", *Nature* **460**, 701-704, 2009.
2. Bourgoïn, R., "The Erasure of Systems at the Quantum Level", viXra:1009.1630.
3. Flores-Hidalgo, G., "The Thermalization Process of an Atom with the Thermal Radiation Field", *J.Phys.A:Math.Theor.* **40**, 13217-13230, 2007.
4. Carroll, R.L., The Eternity Equation, J.R. Rowell Printing Company, Charleston, South Carolina, 1976.
5. Bourgoïn, R., "The Versatile Uses of Cold Fission", *Infinite Energy* **13**, 75, 2007.