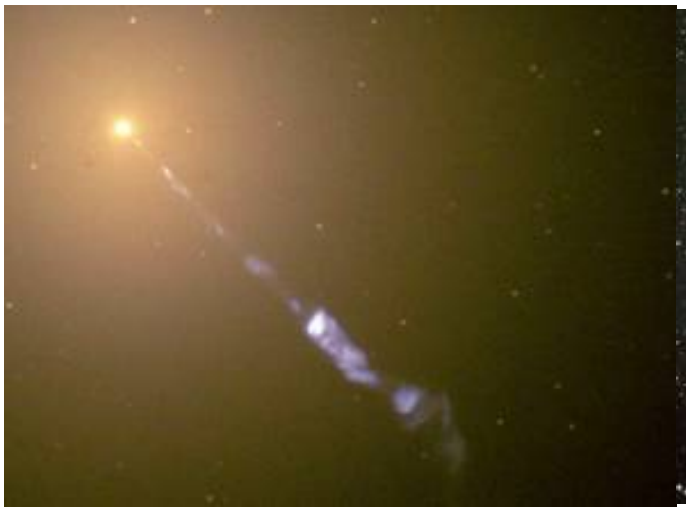

Eruption of the proto-galaxy matter from the M87

http://en.wikipedia.org/wiki/Centaurus_A

Cosmic Evolution in a Cyclic Universe

- **space and time exist forever**
- **Each big bang is not the beginning of time; rather, it is a bridge to a pre-existing contracting big merging era.**
- **the Universe matter undergoes an endless sequence of cycles in which it contracts in a big merge and re-emerges in an expanding big bang, within trillion years of evolution in between**
- **the temperature and density of the universe do not become infinite at any point in the cycle; indeed, they never exceed a finite bound (about a trillion degrees)**
- **inflation of nuclear and molecular masses (matter) have taken place since the big bang; the current homogeneity and flatness were created by next events that occurred after big compression of the matter and formation of the parent star.**
- **the seed for our galaxy formation was created by instabilities arising as the two galaxy matter was collapsing towards a big merge, prior to our big bang**

What about parent star of our galaxy? It has died as well as many surrounded old galaxies parent stars. After eruption almost all stars it can die as a star. Of course remnant of super-massive parent star is super-massive black hole. Evidence is in the link:

Video clip of the observations: http://www.astro.virginia.edu/class/whittle/astr553/Topic14/M1_MW_nuc.mpg

We discuss the origin of such a scalar field in the primary creation process first described by F. Hoyle and J. V. Narlikar forty years ago. It is shown that the creation processes which takes place in the nuclei of galaxies are closely linked to the high energy and explosive phenomena, which are commonly observed in galaxies at all redshifts. The cyclic nature of the universe provides a natural link between the places of origin of the microwave background radiation (arising in hydrogen burning in stars), and the origin of the lightest nuclei (H, D, He3 and He4). It also allows us to relate the large scale cyclic properties of the

universe to events taking place in the nuclei of galaxies. Observational evidence shows that ejection of matter and energy from these centers in the form of compact objects, gas and relativistic particles is responsible for the population of quasi-stellar objects (QSOs) and gamma-ray burst sources in the universe. _Cosmology and Cosmogony in a Cyclic Universe. Jayant V. Narlikar, Geofrey Burbidge, R.G. Vishwakarma

Each star is a cradle of nuclides and a giant plasma diffuser which sorts atoms and molecules by mass and gaseous mixtures by density into spots and within whole shell. Each star creates thermo-nuclear wind inside within radiative zone and nuclear wind outside. Thermo-nuclear wind creates shell of a star.

Nuclear wind is formed by powerful nuclear explosions of the super-heavy nucleuses in the deep interior of the main spots and and within lots of multi-stage separated spot masses (small compact spots) of the convection streams. a-processes create abundances of the super heavy nucleuses within main spots and in the multi-stage separated spot masses within convection streams.

Figure: http://vestige.lmsal.com/TRACE/Public/Gallery/Images/movies/T171_000828.avi

Figure: Explosion of the multi-stage separated compact spot-masses of the super-heavy elements in the interior of the convection streams. (Nuclear reaction occurred by abundance of the super heavy nucleuses in the multi-stage separated spot's masses).

The Sun's spots are too small for the formation planetary bodies, but active starburst nucleuses of all spiral galaxies (super massive precursor stars) can create a super massive spots. After explosion of the super massive spots in the huge shell of the precursor stars are formed embryonic proto planetary bodies. This event creates ejection huge shell masses as well. Ejected huge shell masses create embryonic stars, binary systems, etc. injected highly radioactive spot masses produces embryonic proto-planetary objects.

Embryonic proto-planetary bodies have gaseous stage. Next main stages are liquid, mixed and solid stages. The Earth has mixed stage now. Two main geosphere E (outer nucleus) and B (asthenosphere) are in the liquid conditions still.

Logically, what is born has to die. Can galaxies following this rule too? Usually an elliptical galaxy is formed after cyclonic merging of the two old spiral galaxies (galaxy cannibalism). Huge gravitation of the giant elliptical galaxy M87 could cannibalize dwarf and giant spiral neighbor galaxies later. "Neighbor" ellipse galaxy M87 has a super massive violent neutron star system (quasar http://www.neutronrepulsion.ge/Researches/45.pdf) inside and injection produces fiery "small" and thick proto-matters of the globular clusters. After compression each ejected nebula creates precursor super massive star of the globular cluster. We can see vividly erupted proto-matter of the galaxy from core of M87. "Small" ejected proto-matters of the nebulas consist of recycled neutrons (without positrons and electrons), neutrons, light (alpha) elements and lightest elements and light admixtures mainly. The precursor star after compression can create dwarf wandering galaxies as well. After eruption proto-matter of a precursor star is extending temporary before compression and has enormous temperature, hundreds of millions degrees.