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Chandra Will See It !

Content

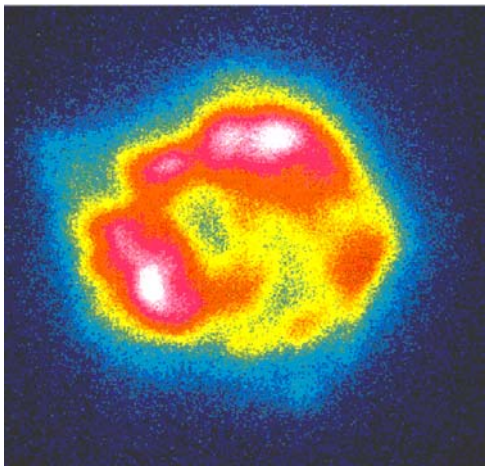
1 Introduction

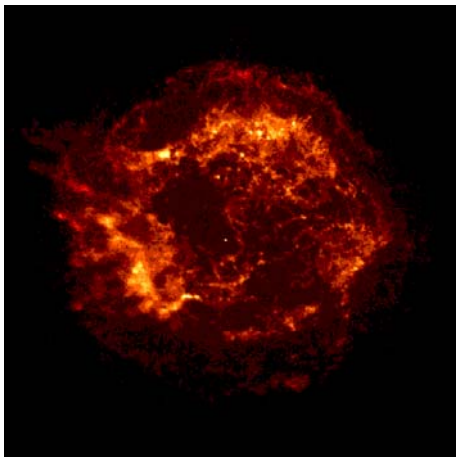
This paper predicts those pictures which will be seen by Chandra, based on the idea that the Universe is formed not only by the one but by the two forces of infinite radius: by gravity and by the electric force. Therefore, please do not be disturbed by new expressions. They will be probably quite common in some years. See details in my book The Electric Universe.

2 SUPERNOVA REMNANTS

Let us analyse Chandra's first picture: the supernova remnant (SNR) of the Cassiopeia A. This beautiful picture (on the right) consists of about 190 of finest filaments.
Prediction: All new SNR-pictures of Chandra will consist of about 100 filaments. This is no evidence. A satisfactory model was missing till now. I predicted this picture 2 days before its publication via my e-mail sent to Prof. V. Burdyuzha in Moscow Academy of Sciences (table 1).

2.1 What is the cause for the X-ray emission of a SNR?





The German X ray telescope could show naturally only less details (see on the left) one decade ago. The X ray was allegedly emitted by high temperature due to the collision of the SNR with the interstellar matter. But, already the ROSAT-picture was not consistent with this collision-model because ROSAT clearly showed that the emission of edges of the SNR is less intensive than those of the inner regions (white). Chandra also confirms this inconsistency. But now, Chandra´s fine filaments totally exclude a collision ! These filaments on the edge are similar to the antennas of a beetle which fly free in the air. These fine floating filaments are not pressed to the body of the SNR by any hindrance. The whole body of this SNR consists of about 190 filaments (I predicted 100 see table 1), they would clearly show a hindrance if any existed. (Also the spot-penumbra or the corona contains 100-200 filaments. Why , I do not know.)

2.2 What is the cause of the detected Fe XXVI-ions?

The answer perhaps is: the high temperature of the SNR. But what is the cause of this high temperature which should be 50 MK to produce these ions ? The luminosity of this „hot SNR" is easy to calculate and it is more than that of 1 million galaxies ! Moreover, the SNR has no fusion-energy anymore, therefore, the „hot SNR" would be a cold SNR in picoseconds emitting this power somehow from its about 10 sun-masses of „50 MK".

2.3 What is the cause of these beautiful filaments?

There is no answer. Such a big „dynamo" would be impossible because it should be visible and should have a visible function (similar to a spider which makes a web), quite contrary to the hidden „solar dynamo".
The electric model of the prediction above is: the progenitor giant star emitted a negative stellar wind during its short life due to the thermoelement-effect. The positive charge remained in the core. This cumulated positive charge inhibited the total collapse of the implosion into a black hole and exploded with the matter of the solar body. The motion of these positively charged matter outwards formed positive currents which attracted each other. This attraction formed the filaments, all with a circular cross section. These filaments are not hot and not cold, their ions move parallel to each other and not in thermal zig-zag. The positive filaments attract strongly free electrons which fall onto the e.g. Fe XXVI ions and emit X ray in a cold way. No collision with interstellar matter, no non-physical supposition of a high temperature without visible and infrared emission is necessary and naturally no dynamo. Also the strong radio-wave emission of the SNR is automatically explained due to the positive matter in expansion.The about 10 black bubbles of the SNR were also predicted but they cannot be discussed here.

3 BROWN DWARFS

Chandra will show that the young brown dwarfs not only emit X ray, but they emit it irregularly similar to young stars and also from its two jets similar to T-Tauri stars. The cause is also the same: positively charged matter which falls into the star during the formation. This matter swims up as proton bubbles. The rotation of positive matter near the surface produces the strong magnetic field of the dwarf which inclinates all electric surface-explosions to north or to south pole. Moving charged matter forms two long filaments of circular cross section along the rotational axis.

4 ABELL 30

Chandra will show that only this white dwarf and its emitted helium fingers emit X ray and an inexplicable „2 MK hot wind of the white dwarf" do not fill the star´s vicinity. Hubble and Chandra will show congruent pictures.
Chandra will show that gamma ray bursts (GRBs) are electrostatically exploding white dwarfs in our proximity. The cumulated positive charge in the core of a star (table 1) emits X ray as an anode in a cold way. This charge produces a strong magnetic field up to 1 000 Tesla due to its quick rotation and emit helium fingers which fly away as filaments due to their electric charge. But after the age of the emission of the helium fingers, the white dwarf cools down below recombination-temperature. An electric explosion occurs at once due to the relativistic electrons which equalize the temperatures in deeper layers. When each proton recombines with an electron, the protons in overbalance explode the dwarf in seconds. We cannot see this cold explosion, but the accelerated positive charge emits gamma rays in pulses. The achieved 99.99% light velocity of exploding protons is already measured. But this is no mysterious „small Big Bang" because its e.g. 10 gigalightyear-distance is only simulated in the following way. We see this cold electric explosion only minutes or days later when it collides with a nebula around the star if any existed. A quickly expanding shell which glows inside comes into existence . But only the receding glowing shell of a velocity of e.g. 50% light velocity can be seen, the quick approaching part of a velocity of 0.5c shows its cold side to us. The colliding protons and alpha particles ionise iron atoms in the shell and these e.g. Fe XXV ions emit X ray when electrons are later available, similar to a solar flare. These X rays can be seen by Chandra from the receding and also from (through) the approaching shell.
1 Chandra will see that a just appearing GRB will show a big and symmetric X ray-shift in red and blue directions. These shifts are decreasing due to the cumulated mass of the expanding shell.
2 Older GRB will show a small, round and detectable expanding X ray bubble with very small and symmetric redshift and blueshift and not an X ray point of cosmological redshift !

Table 1 Last explosion pour huge positive charge into the X ray active halo which is the „cemetery" of the stars.

Name of explosion:	Supernova	Gamma ray burst
Exploding body:	Big star	White dwarf
Mass:	M>7 solar masses	1<M<7
Cause of explosion:	Yukawa-heat of the neutron star	Positive charged body cools down
Temperature of expl:	1 GK	10 000 K
Typical matter:	Fe, Co	He
main energy export:	Neutrinos	Gamma rays
Remnant own temperature:	3 K (no 2 MK !)	3 K
Radiation of the remnant:	X ray (recombination) UV (recombination) Visible (recombin.) No infrared Strong radiowaves	X ray (recombin.) ? No visible later No infrared Strong radiowaves
Form of remnant:	Round cloud, later hundred filaments Twenty bubbles	Round cloud, later 10-20 filaments No bubbles
Last detectable diameter of remnant:	300 lightyears	0.5 lightyears
First magnetic field:	Maximally: 60 GT	Maximally: 10 T

(table from my report at the UNESCO Science-world conference in Budapest 1999 July 3)

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