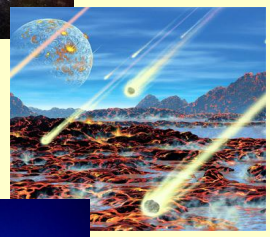
From "the Big Bang" to Homo Sapiens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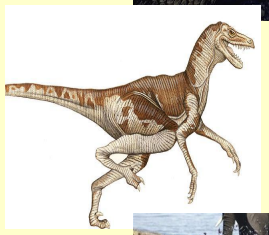


The introduction

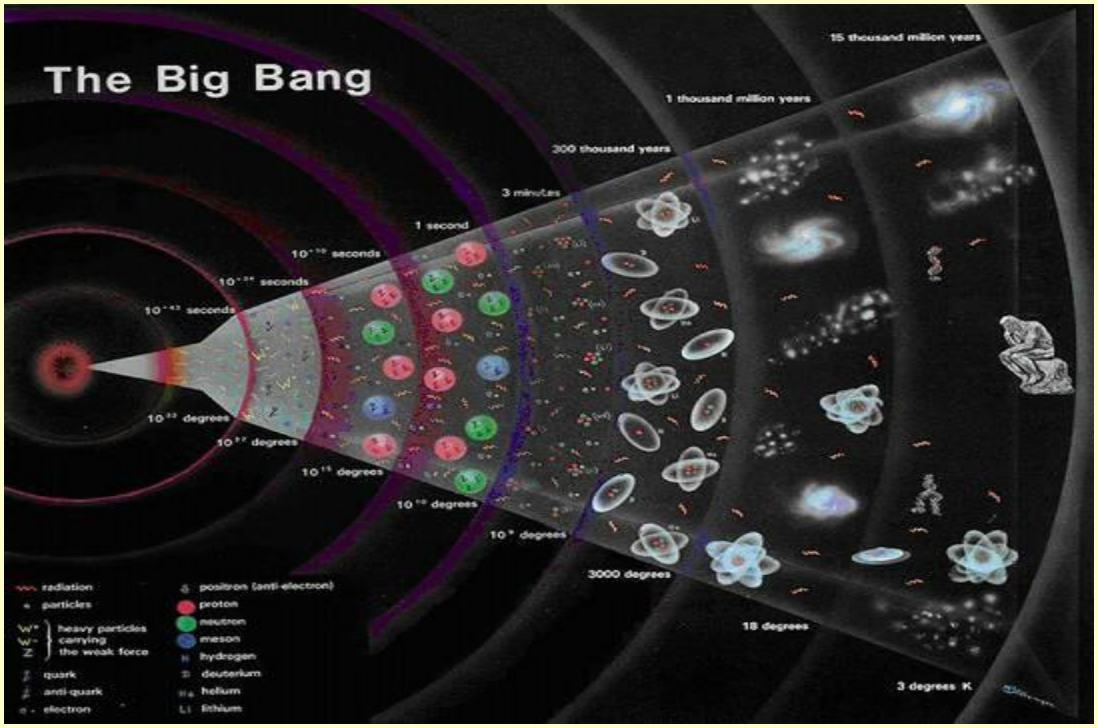
Life on the Earth was about 3 thousand millions years ago. But our Universe was 37,5 billion years earlier.

All has begun with *the Big Bang* …

The Big Bang (37,5 milliard years ago...)

The Universe does not exist. There is only a small point, very dense and hot. There is «the Big Bang». From a point there is space and time. There are a lot of particles and antiparticles.

Particles and antiparticles come into collision and both of them are destroyed. As a result of this «microscopic fight» there are only particles. By that time the Universe is enlarged with enormous speed.



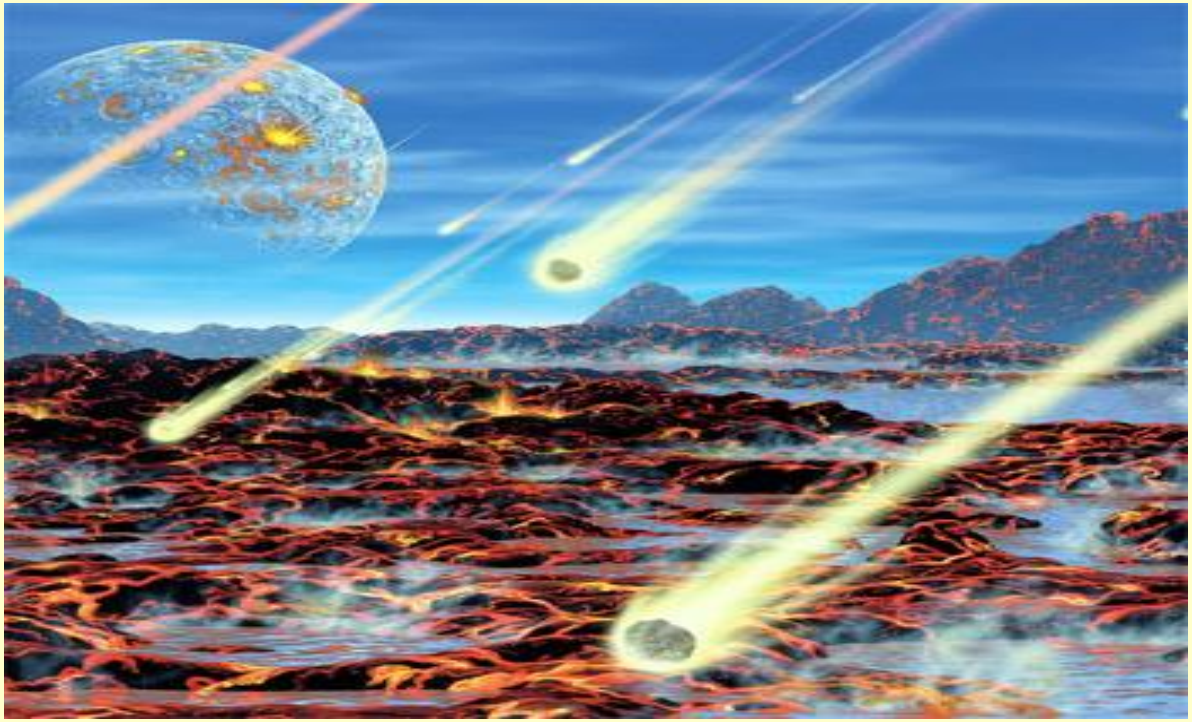
The solar sistem

The solar system is only a dust and gas cloud. Gradually the biggest part of this cloud gathers in its centre. So there is the Sun. The rest of the part divides into clots and forms planets, including the Earth.

The beginnig of life on the Earth

Volcanoes secretes smoke with parts of steam. There is sour water on the Earth. The first organisms (bacteria) live in this water. Organisms are brought on the Earth by a meteorite.

(but this version is unchecked)



Invertabrate animals (510 million years ago...)

The Cambrian period

Bacteria become invertebrate animals with a chitin cover.

The first fish. Their exit on a land (408-360 million years

The Silurian and their Devonian periods

inverteb rate animals → Not yet fish → fish

There are disputable factors (climatic changes – fall of level of ocean - huge emission of lava). That's why fish live on a land.

There is an important group of fish – Sarcopterygii (lat.) . They are ancestors of all four-footed animals.

Amphibians (408-360 million years ago)

The Coal period

The climate becomes more droughty. As a result some fish can live in water and on a land. They can breathe in water and ordinary air.

Land reptiles (286-248 million years ago)

The Perm period

Ocean becomes shallow. There are a lot of of mountain ranges. As a result the climate becomes drier. Many creatures get a leather shell to live only on a land. There are land reptiles. Many ancient groups of invertebrate animals die out.

Dinosaurs (286-248 million years ago)

The Triassic, the Jursky and the Cretaceous periods

There is a new group of reptiles – Thecodontia (lat.). They are ancestors of birds, dinosaurs, crocodiles and Pterosauria (lat.).

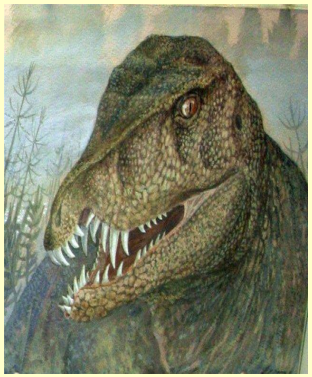
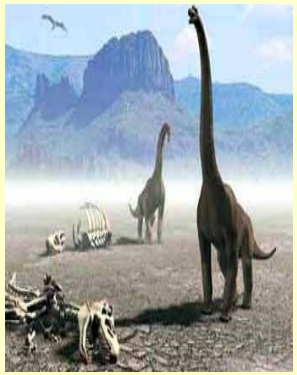
In the Triassic period there are a lot of dinosaurs: Sauropoda (lat.) and gigantic long-necked dinosaurs. There are Pterosauria (lat.). Also there is a big group of predatory dinosaurs – Carnosauria (lat).

Dromaeosauridae (lat.) are small predatory dinosaurs. They are ancestors of birds.

There are many pterodactyloidea (lat.).

There are marsupials, placentary mammals and ancestors of crocodiles.




The first large mammals

Dinosaurs die out. Mammals evolve in the first whales, elephants, ancestors of horses and monkeys.

Anthropoids

There are anthropoids now. They differ from other monkeys. They do not have a tail. They have rudiments of intellect.

Homo Sapiens

There is an intermediate link – australopithecus. Their brain cerebrum is rather large, but it does not differ from a brain cerebrum of anthropoids very much.

Australopithecus can walk upright and do prehensile movements.

Probably australopithecus are ancestors of Homo Sapiens.

Thank you!