Solar System Formation Terminology

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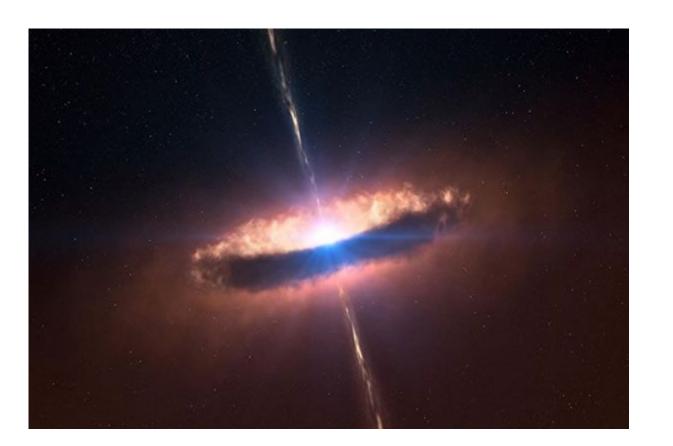
What is a Nebula?

a cloud of gas and dust in outer space, visible in the night sky either as an indistinct bright patch or as a dark silhouette against other luminous matter.



What is the Nebular Hypothesis?

the theory that the solar and stellar systems were developed from a primeval nebula.



Nebular Hypothesis Continued . . .

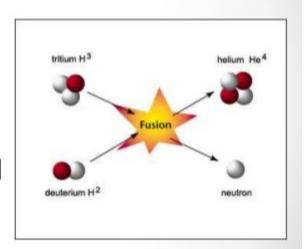
The **nebular hypothesis** is the most widely accepted model in the field of cosmogony to explain the formation and evolution of the Solar System, as well as other planetary systems.

What is Nuclear Fusion?

a nuclear reaction in which atomic nuclei of low atomic number fuse to form a heavier nucleus with the release of energy.

Nuclear Fusion

- Nuclear fusion is the process by which two nuclei combine to form a heavier element.
- New stars initially will fuse hydrogen nuclei together to form helium



What are Planetesimals?

a minute planet; a body that could or did come together with many others under gravitation to form a planet.

Planetesimals Continued . . .

A **planetesimal** is an object formed from dust, rock, and other materials.

Planetesimals can be anywhere in size from several meters to hundreds of kilometers.

What is a Protoplanet?

A protoplanet is a large planetary embryo that originated within a protoplanetary disc and has undergone internal melting to produce a differentiated interior.