

Steps of the Nebular Theory

Nebula's

Nebula is the Greek word for
cloud

Nebula's are made of,
hydrogen, helium, and
microscopic dust grains. This
gas and dust collect into large
clouds.



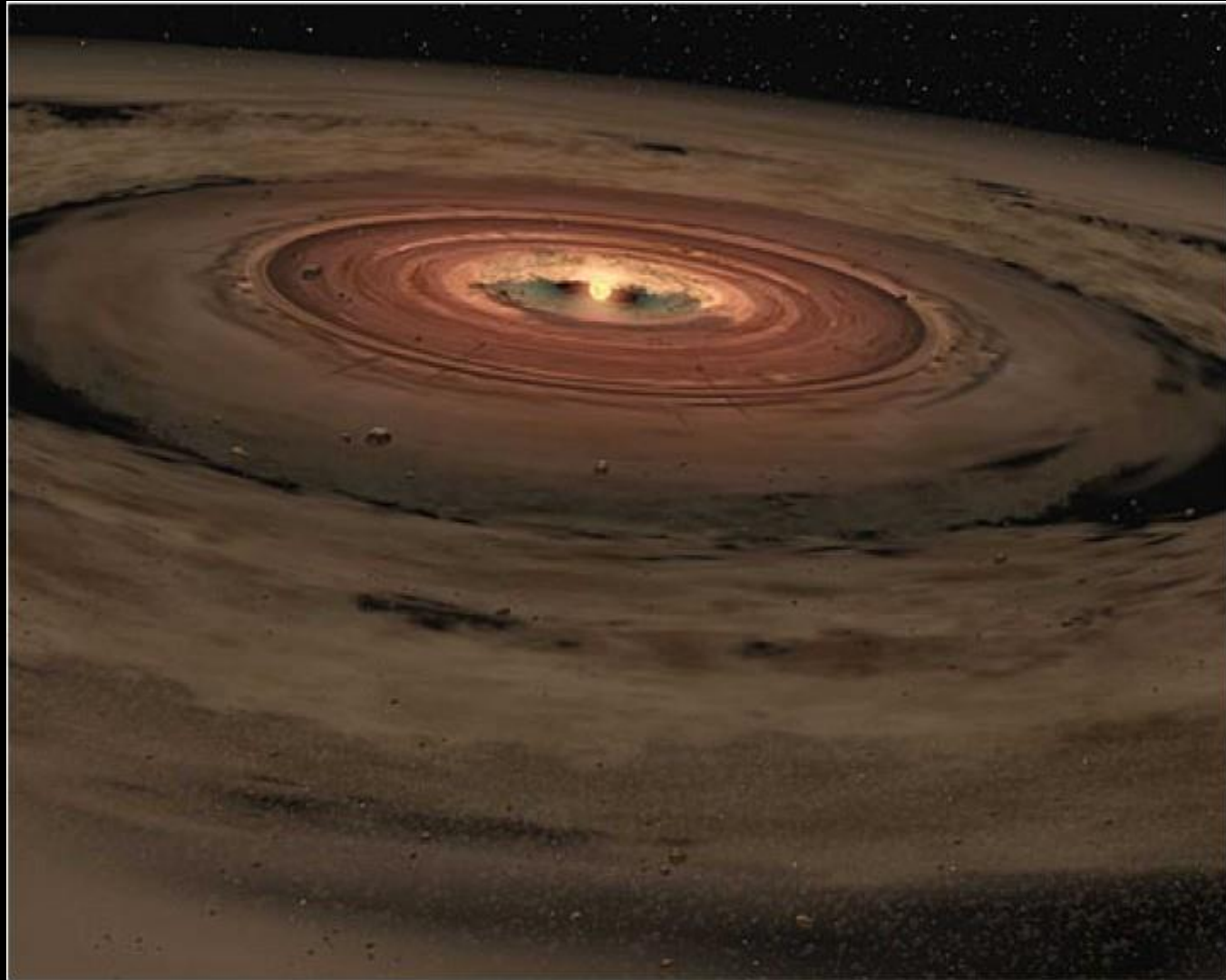
1. Collapsing



Before a nebula can collapse, it needs some sort of disturbance to start the motion, like the shockwave from a nearby dying star's supernova explosion, allowing the cloud to collapse and begin spinning. The shockwave can cause the nebula to slowly contract and begin to spin

2. Spinning

Gravity pulls the gas and dust debris towards the center as the clouds continue to spin faster and faster.

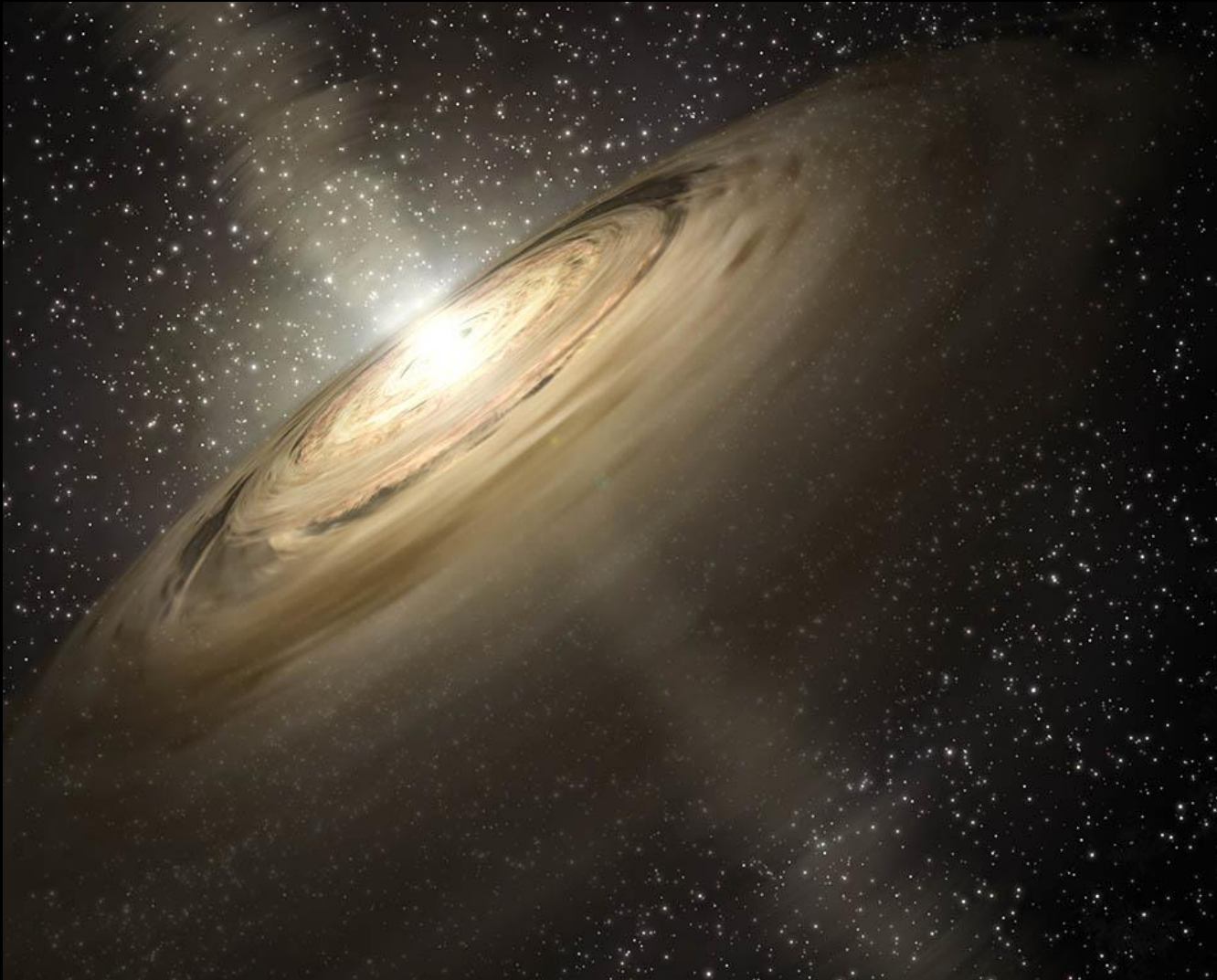


3. Flattening

Gravity pulls the gas and dust toward the center of the disk. The spinning increases and causes the gas and dust to form a flattened disk.



4. Condensing



Because gravity pulls most of the gas and dust to the center, a protostar is created.

As the gases in the center become hotter, eventually nuclear fusion will begin and a star is born in the center of the spinning disk

5. Accretion

The remaining debris from the original nebula, then begins the accretion process to create the planets.

Accretion is the growth of grains through collisions - the real planet building process

Collision during the planet building process include, direct impacts and gravitational attraction.

Birth of a Solar System

This concept is called the nebular theory and explains how our Solar System formed.

