

Planet formation sites observed today as dust disks of T Tauri stars. Sun and our Solar system formed ~ 5 billion years ago. Modern theory of planet formation is evolutionaryMany stars should have planets! planets orbiting around other stars = "Extrasolar planets" Extrasolar planets can not be imaged directly.

What are the key features of the Solar System?

The document summarizes key features of the solar system. It discusses that the solar system formed from a rotating cloud of gas and dust according to the nebular hypothesis. The inner terrestrial planets are rocky with thin atmospheres, while the outer gas giants are low density with thick atmospheres.

How did a Nebula form the Solar System?

The document summarizes the formation of the solar system from a large nebula of gas and dust. The nebula began to condense due to gravity, compressing and flattening into a disc. As it heated up from compression, fusion began in the center to form the early sun.

When did the Solar System start?

1. The formation and evolution of the Solar System began about 4.57 billion years agowith the gravitational collapse of a small part of a giant molecular cloud.

How did planetesimals form?

Eventually, chunks of material in the disc collided and stuck together through accretion to form planetesimals, which were the building blocks of the inner, rocky planets that were warmer and the outer, gaseous planets that were cooler. Over time, the remaining gas and dust was blown away by the solar wind.

How did fusion form the Sun?

As it heated up from compression, fusion began in the center to form the early sun. Eventually, chunks of material in the disc collided and stuck together through accretion to form planetesimals, which were the building blocks of the inner, rocky planets that were warmer and the outer, gaseous planets that were cooler.





5. The theory: Hydrogen and other gases swirled around and condensed into our sun and its planets. The nebular hypothesis is the most widely accepted model in the field of cosmogony to explain the formation and evolution of the Solar System. It suggests that the Solar System formed from nebulous material. The theory was developed by Immanuel Kant and ???



Formation of the Solar System Ch. 27 Sec. 1 Solar System Formation of Earth's Oceans As Earth cooled, water vapor condensed to form rain, and this collected on the surface to form the first oceans. The first ocean was probably made of fresh water; however, after millions of years. Get started for FREE Continue.



The document provides information about the formation and components of the solar system. It begins by outlining learning outcomes related to the origin of the solar system and profiles of its members. It then describes the two types of planets - terrestrial and Jovian - and provides details about each of the eight planets. Additional sections





The solar system presentation - Download as a PDF or view online for free. The nebular hypothesis is the most widely accepted model in the field of cosmogony to explain the formation and evolution of the Solar System. It suggests that the Solar System formed from nebulous material. 6.



Origin of the Solar System ??? Any acceptable scientific thought on the origin of the solar system has to be consistent with and supported by information about it (e.g. large and small scale features, composition). There will be a ???



4. A Collapsing Interstellar Cloud ??? Our solar system may have begun when interstellar gas started to condense as a result of gravity and became concentrated enough to form the Sun and planets. ??? The collapse is ???





SOLAR SYSTEM FORMATION. SOLAR SYSTEM FORMATION. THE NEBULAR THEORY. 6- Steps to Form a Solar System. Step 1: Solar Nebula. Huge cloud of cold gas and dust. Spinning slowly. Step 2: Protosun. The solar nebula condenses into a dense central region and a less-dense outer region. Begins to spin faster and flatten. 945 views ??? 10 slides



Click to download the MS Powerpoint file (13 Mbytes). How the Inner Solar System Formed This video from NOVA examines the formation of the terrestrial planets by accretion. WGBH Inquiry Based Teaching of the Solar System This video follows how a teacher uses inquiry methods to teach about the scale of the solar system in a middle school



12 Formation of the Solar System. According to dating of rocks, scientists believe the solar system is approximately 4.6 billion years old. Nebular model = model for the formation of the solar system in which the sun and planets condense from ???





Formation of the Solar System 1) The Nebular Theory: The theory that our solar system formed from a swirling mass of gas and dust. a. Nebula: Any large cloud of interstellar gas and dust. b. The Nebular theory was one of the ???



Nobel Prize winner Harold Urey's compositional studies on meteorites in the 1950s and other scientists" work on these objects led to the conclusion that meteorite constituents have changed very little since the solar system's early history and can give clues about their formation. The currently accepted theory on the origin of the solar



Following closely along with the AQA GCSE physics book, this lesson PowerPoint covers chapter 16.1: The Formation of the Solar System. The lesson objectives are: How the solar system formed; What is meant by a protostar; How energy is released in the Sun; Why the Sun is (currently) stable





Formation of the Solar System Uncovering the origin of the Solar system Early days of the formation Building the planets and other stuff Other planetary systems ??? A free PowerPoint PPT presentation (displayed as an HTML5 slide show) on PowerShow - id: 3bfe47-MzgxM Solar System - Title: PowerPoint Presentation Author: Sumanas Last



1 Formation of the solar system Utep planetary science January 28, 2019. 2 . 3 Download ppt "Formation of the solar system" Similar presentations . Formation of the Solar System. CHAPTER 5: Formation of the Solar System and Other Planetary Systems.



The Earth is part of the Solar System the Solar System is part of the Milky Way galaxy and the Milky Way galaxy is part of the Universe. The story of the origin and history of the Earth requires that the origin and history of the Universe and Solar System must be considered. 25 Origin of the Universe. Evidence to be considered when interpreting the





SOLAR SYSTEM FORMATION. SOLAR SYSTEM FORMATION. THE NEBULAR THEORY. 6- Steps to Form a Solar System. Step 1: Solar Nebula. Huge cloud of cold gas and dust. Spinning slowly. Step 2: Protosun. The solar nebula condenses into a dense central region and a less-dense outer region. Begins to spin faster and flatten. 947 views ??? 10 slides



SOLAR SYSTEM FORMATION. SOLAR SYSTEM FORMATION. THE NEBULAR THEORY. 6- Steps to Form a Solar System. Step 1: Solar Nebula. Huge cloud of cold gas and dust. Spinning slowly. Step 2: Protosun. The solar nebula condenses into a dense central region and a less-dense outer region. Begins to spin faster and flatten. 949 views ??? 10 slides



1. Lesson 1-The Formation of the Universe Ppt Free download as Powerpoint Presentation (.ppt),
PDF File (.pdf), Text File (.txt) or view presentation
slides online. The document provides information
about the universe, galaxies, and the solar system.
It begins by explaining that the universe contains
over 100 billion galaxies, each containing millions or
billions of stars held ???





Title: Formation of the Solar System 1 Chapter 8. Formation of the Solar System; 2 Our solar system was born from the collapse of a great cloud of gas. A nebula that formed from hydrogen gas and the remnants of supernovae. 3 (No Transcript) 4 (No Transcript) 5 (No Transcript) 6 (No Transcript) 7 (No Transcript) 8. The gravitational collapse of



The document provides information on the formation of the solar system. It describes the two categories of planets - terrestrial planets which are closest to the sun and include Mercury, Venus, Earth, and Mars, and jovian ???



1.-lesson-1-the-formation-of-the-universe-ppt - Free download as PDF File (.pdf), Text File (.txt) or view presentation slides online. The document discusses the formation and structure of the universe, galaxies, and our solar system. It begins by explaining that the universe originated from a hot explosion called the Big Bang around 13.7 billion years ago.





4. A Collapsing Interstellar Cloud ??? Our solar system may have begun when interstellar gas started to condense as a result of gravity and became concentrated enough to form the Sun and planets. ??? The collapse is initially slow, but it accelerates and the cloud soon becomes much denser at its center. ??? Rotation slows the collapse in the equatorial plane, and ???



SOLAR SYSTEM FORMATION. SOLAR SYSTEM FORMATION. THE NEBULAR THEORY. 6- Steps to Form a Solar System. Step 1: Solar Nebula. Huge cloud of cold gas and dust. Spinning slowly. Step 2: Protosun. The solar nebula condenses into a dense central region and a less-dense outer region. Begins to spin faster and flatten. 948 views ??? 10 slides



Now known: Solar system has 165 moons, one star, eight planets (added Uranus and Neptune), eight asteroids and more than 100 Kuiper belt objects more than 300 km in diameter, smaller asteroids, comets, and meteoroids 6.1 An Inventory of the Solar System Early astronomers knew: Moon, stars, Mercury, Venus, Mars, Jupiter, Saturn, comets, and meteors





The document summarizes key features of the solar system. It discusses that the solar system formed from a rotating cloud of gas and dust according to the nebular hypothesis. The inner terrestrial planets are rocky ???



21. \*7 DAYS OF CREATION \*Day 1 - God created light and separated the light from the darkness, calling light "day" and darkness "night." \*Day 2 - God created an expanse to separate the waters and called it "sky." \*Day 3 - God created the dry ground and gathered the waters, calling the dry ground "land," and the gathered waters "seas."



5. The theory: Hydrogen and other gases swirled around and condensed into our sun and its planets. The nebular hypothesis is the most widely accepted model in the field of cosmogony to explain the formation and ???





The most widely accepted theory of planetary formation, known as the nebular hypothesis, maintains that 4.6 billion years ago, the Solar System formed from the gravitational collapse of a giant molecular cloud which was light years across.



Title: Lecture 7: Formation of the Solar System 1
Lecture 7 Formation of the Solar System Dust and
debris disk around Fomalhaut, with embedded
young planet. Claire Max; April 24th, 2014; Astro
18 Planets and Planetary Systems; UC Santa Cruz;
2 Solar System Origins Outline. How can we make
a theory of something that happened gt 4 billion



Lecture 5-6 - Solar system formation theories ???
Topics to be covered: ??? Laplace nebula theory
??? Jeans" tidal theory ??? Solar nebula theory
PY4A01 Solar System Science. Planet formation
models ??? Three basic models have been
proposed: ??? Tidal theory: Planets formed from
condensed gasses "ripped" from an all ready
formed Sun. ??? Capture theory: During a close ???





An introductory, non-technical survey of changing scientific ideas about the solar system from antiquity to the beginning of the 21st century. Includes three sidebars, a timeline, a glossary, and suggestions for further reading. download Download free PDF View PDF chevron\_right.



Formation of the Solar System Sun's Mass Jupiter's Mass 7 other Planets, Dwarf Planets, Moons and other Objects Mass. A massive star will produce a supernova when it dies. Solar Nebula Contains lighter elements (up to Iron) and heavier elements created during supernova.. Protostar ??? becoming the Sun in the center. It is formed by gravity.. Inner Area - ???