

Chapter 2. The Universe to Human Emergence: A Story of Becoming

Chapter 2. G. Media

The Universe

1. The Fabric of the Cosmos: Universe or Multiverse?

52 minutes, PBS, 2011

Is our universe unique, or could it be just one in an endless "multiverse"?

Hard as it is to swallow, cutting-edge theories are suggesting that our universe may not be the only universe. Instead, it may be just one of an infinite number of universes that make up the "multiverse." In this show, Brian Greene takes us on a tour of this brave new theory at the frontier of physics, showing what some of these alternate realities might be like. Some universes may be almost indistinguishable from our own; others may contain variations of all of us, where we exist but with different families, careers, and life stories. In still others, reality may be so radically different from ours as to be unrecognizable. Brian Greene reveals why this radical new picture of the cosmos is getting serious attention from scientists. It won't be easy to prove, but if it's right, our understanding of space, time, and our place in the universe will never be the same

website: <http://video.pbs.org/video/2168433605>

2. Journey of the Universe

2 hrs. 42 min. PBS, 2011

This dramatic and expansive film re-imagines the universe story and reframes the human connection to the cosmos. Created by a renowned team of scientists, scholars and award-winning filmmakers, it was filmed on the Greek island of Samos, the birthplace of Pythagoras. The host is evolutionary philosopher Brian Thomas Swimme, whose stories awaken us to the beauty and complexity of our planet.

Website: <http://video.pbs.org/video/2172200554>

3. Into the Universe with Stephen Hawking

2 hours 30 minutes, 2010, available on Netflix.

Celebrated theoretical physicist and cosmologist Stephen Hawking takes viewers on a captivating guided tour of the universe, explaining its origins and mysteries using straightforward language and state-of-the-art computer animation.

I have seen this one, very intriguing. 4.2 stars

4. IMAX: Hubble

2010, 45 minutes. Available on Netflix

Actor Leonardo DiCaprio narrates this awe-inspiring documentary that takes viewers on a visually stunning IMAX 3-D journey to explore the faraway galaxies viewed by the Hubble Space Telescope in its travels throughout the cosmos. During the mission, astronauts walk in space, contend with successes and setbacks, view nebulae and galaxies, observe the birth of a star, witness a powerful supernova and much more. I haven't seen it but it looks interesting. 3.7 stars

5. Journey to the Edge of the Universe

2008, 90 minutes, available on Netflix

This National Geographic program takes you on an epic, uninterrupted voyage through the cosmos, beginning on Earth and traveling outward through the solar system and the Milky Way, past distant galaxies and to the very limits of the universe. Images from the Hubble telescope and innovative computer graphics make possible the

single, long traveling shot that comprises this journey, and unobtrusive narration explains the sights along the way.

I haven't seen this one but it looks very good. 3.1 stars

6. Monster Black Holes

National Geographic, 2008, 50 minutes, available on Netflix

Take a journey into deep space with this illuminating National Geographic documentary and hear from scientists who explore the mysteries of black holes -- regions of space that consume everything in their path and emit a massive amount of energy. Topics include how black holes form, how scientists might be able to harness their power, and whether a black hole at the center of the Milky Way could one day destroy the galaxy. 3.1 stars

The Origins of the Solar System and Milky Way

1. Origins of the Solar System

13 min., PBS, 2011

A supernova may have triggered the formation of our sun and planets

<http://video.pbs.org/video/1790621534#>

2. Tour of the Solar System

PBS, 2011

Explore the planets, visit the moon, and gaze at the stars in this 3-D interactive model of the solar system.

<http://www.pbs.org/wgbh/nova/space/tour-solar-system.html>

3. Inside the Milky Way

National Geographic, 2010, 95 minutes, available on Netflix

As they learn about important moments in the Milky Way's history, viewers will be astounded by all that exists 100,000 light-years away in this engrossing program that uses the latest science and a 3-D state-of-the-art CGI model of the galaxy. Enthralling black holes, stars that perish and others that spring to life, and other planets possibly bustling with life are just some of the sights seen along the journey. 3.1 stars

4. Wonders of the Solar System

3 discs, 2010, available Netflix

While visiting Earth's most impressive natural wonders -- including spectacular mountains, deserts and oceans -- host Brian Cox explains how our planet has been shaped over billions of years and explores its place within the solar system. Drawing on a wealth of scientific data and remarkable images from space, the series offers viewers valuable new insight into our magnificent home and our planetary neighbors.

Haven't seen but has good ratings. 3.9 stars

The Formation of Earth

1. Origins: Earth is Born

51 min., PBS, 2004

Journey back to the beginning of everything: the universe, Earth, and life itself.

<http://video.pbs.org/video/2052249215>

2. Earth: The Biography

Series, 2 discs, 2008, available on Netflix

From the BBC comes this momentous documentary that uses satellite images and compelling narration to chart our planet's intriguing history, exploring Earth's unique and diverse features while stressing the importance of protecting it for the future. Combining time-lapse photography and computer-generated imagery, the video

shows how our world -- forged by volcanoes, the atmosphere, glaciers and oceans -- has teetered between disaster and renewal. I haven't seen this one but can't go wrong with a BBC documentary. 4.1 stars

3. How the Earth Was Made

2007, 94 minutes, available on Netflix

With remarkable on-location footage and stunning special effects, this informative program from "The Continents" series traces the course of the Earth's evolution from a bubbling mass of molten rock to the hospitable planet we live on today. Cutting-edge scientific insight and interviews with prominent geologists will fire your imagination and ensure that you'll never look at the Earth in quite the same way again. 4.1 stars

4. Miracle Planet

5 discs, 2004, available on Netflix

Life on Earth, in many ways, is little more than a lucky break. As narrator Christopher Plummer explains in this astounding five-part history of our planet, numerous environmental upheavals have regularly driven the dominant species to extinction; despite all these dramatic changes, life has not only survived but thrived. Interviews with leading scientists help shed light on how the world's diverse creatures have evolved. 3.5 stars

Evolution

1. Evolution

4 discs, 2002, PBS, also available on Netflix

Covering all facets of the evolutionary process, this comprehensive PBS documentary -- narrated by actor Liam Neeson -- looks at everything from the genesis of Charles Darwin's natural selection theory to the clash between science and spirituality. Via computer animation, dramatic re-creations, film clips and expert interviews, the seven-part series presents a definitive view of how evolution has changed our perceptions of the world. Good ratings, 3.8 stars.

The Life of Mammals series

2002, 4 discs, available on Netflix,

Naturalist David Attenborough hosts this in-depth examination of the most diverse class of life on Earth: mammals, from the smallest shrew to the biggest whales and the most advanced primates.

I have seen this series, very good. 4.2 stars

Human Evolution

1. PBS 3 part series Becoming Human

A Nova series, well done. Preview <http://video.pbs.org/video/2098138008>

Part 1: Becoming Human

180 minutes, also available on Netflix, 4 stars,

Bringing our early ancestors to life through striking computer graphics based on new discoveries, this NOVA special examines how early hominids lived and how they evolved through the ages to eventually become modern humans. Interviews with the world's top scientists and footage shot as fossils are unearthed shed light on recent breakthroughs. Topics include a 3-million-year-old child, the recent decoding of the Neanderthal genome and much more.

First Steps: 6 million years ago, what set our ancestors on the path from ape to human?

<http://video.pbs.org/video/1312522241>

Part 2: Becoming Human <http://video.pbs.org/video/1319997127>

Birth of Humanity: New discoveries reveal how early humans hunted and formed families.

Part 3: Becoming Human <http://video.pbs.org/video/1327194805>

Last Human Standing: Many human species once shared the globe. Why do we alone remain?

2. Project Nim

2011, 93 minutes, available on Netflix

Oscar-winning filmmaker James Marsh peers inside the landmark 1970s experiment for an unflinching look at Nim, the chimp whom scientists raised as human and taught sign language to prove that apes can communicate like humans. I haven't seen it but looks interesting. 3.5 stars

3. Ape Genius

2008, 56 minutes, available on Netflix

Though researchers have discovered similarities between the great apes and humans, this "Nova" special looks at the important differences that distinguish us from these primates. Studies of chimpanzees, orangutans, gorillas and bonobos have yielded astonishing evidence of their imaginative intelligence and rich emotional lives. But, ultimately, they lack the cognitive traits to advance to a human level of culture and learning. 3 stars

4. Journey of Man

PBS, 2002, 120 minutes, also available on Netflix

The origins of humankind are put under the microscope of this riveting PBS documentary film in which geneticists, historians, anthropologists and other theorists try to trace the beginnings of the human race. Could the seed, in fact, have begun with a man in Africa who roamed the Earth tens of thousands of years ago? Or have scientists merely found yet another descendant of a prehistoric predecessor? 3.8 stars

5. Homo Sapiens

2 discs, 2005, available on Netflix

Explore the fascinating evolution of man with this groundbreaking documentary that traces our 250,000-year journey from simple-minded hominids to the culture-shaping, complex thinkers of today. Directed by Jacques Malaterre (A Species Odyssey), this in-depth, anthropological program examines the history of mankind, re-creating the steps that led us from being animalistic scavengers to the planet's dominant species.

Average ratings, I hope that it isn't a portrayal of early humans as "savages." 2.7 stars

6. Clash of the Cavemen

2008, 94 minutes, History Channel

Inspired by scientific theories about human history and evolution, this fascinating History Channel docudrama imagines what it would have been like if humankind's most likely ancestors, the Cro-Magnons, had lived side-by-side with the Neanderthals. While Cro-Magnons are smarter and more creative, Neanderthals are certainly stronger -- and their differences add up to a dramatic clash of brains vs. brawn.

Average star ratings, sometimes these are violent.

7. The Human Spark

2009, 180 minutes, PBS also available on Netflix

Drawing on the theory that a catalytic "spark" converted humankind from just another species to planetary top dog, actor and science enthusiast Alan Alda spearheads a transcontinental hunt for the origins of that signal shift. The pursuit begins among the paleolithic cave paintings of Lascaux, leads to a comparison study of humans and chimps in Puerto Rico, then lands Alda back where he started -- in a detailed neuro-scan of his own brain. 3.2 stars

8. Early Humans : 4 million years ago to 10 000 B.C

YouTube short clip on human evolution, very neutral

<http://www.youtube.com/watch?v=y5zhBcXGK0I&feature=related>