

UNLV LIBRARY
MEDIA RESOURCES CATALOG
PHYSICS/ASTRONOMY
Summer 2009

About Lasers.

The Slide Centre Ltd. (1981)
Introduces lasers, how they work, and then goes into aspects of gas lasers and solid state lasers including p-n injection lasers.

37 Slides
Cassette
Commentary (17 p.)
TK 7871.3 A26

Aircraft Design.

PBS Video (1990)
Students will see that only through an understanding of math could engineers design aircrafts.

Video Cassette (15 min.)
QA 10.5 F882

Amazing Planet.

Distributed by Warner Home Video,
[2007]

In this 3 hour series, one can witness in seconds what took the Earth eons to create: bumper-car continents; ice ages pulsing out of the poles and back; the Himalayas surging upwards; sand dunes swallowing, then uncovering African villages, and more!

2 videodiscs (ca. 180 min.)
QE501.2 .A43 2007

America's Achievements in Space.

Easton Press

- Vol. I: New View of Space, 28 min.
Friendship 7, 58 min.
Vol. II: Apollo 8-Go for TLI, 22 min
Gemini 4, 28 min.
Mariner 9, 29 min.
Vol. III: Voyager, 25 min.
Gemini 8 - This is Houston Flight, 28 min.
Who's Out There?, 28 min.
Vol. IV: Space Shuttle , A
Remarkable Flying Machine, 30 min.
Apollo 9: The Space Duet of Spider & Gumdrop, 29 min.
Jupiter Odyssey, 28 min.
Vol. V: The Flight of Apollo 11, 29 min.
Freedom 7, 29 min.
Gemini XII Mission, 25 min.
Vol. VI: Universe, 28 min.
Apollo 13: Houston We've Got a Problem!, 28 min.
Space Shuttle Columbia - The Second Flight, 29 min.
Vol. VII: Four Rooms - Earth View, 28 min.
The Flight of Faith 7, 28 min.
Apollo 15: In the Mountain of the Moon, 28 min

**America's Achievements in Space.
(con't)**

- Vol. VIII: Apollo 16: Nothing So Hidden, 28 min.
Planet Mars, 29 min.
Mission of Apollo-Soyuz, 29 min.
Vol. IX: Apollo 17: On the Shoulders of Giants, 28 min.
Mercury - Exploration of a Planet, 24 min.
We Deliver (Shuttle Flights 5-8), 29 min.
Vol. X: The World Was There (Mercury), 28 min.
Legacy of Gemini, 28 min.
The Time of Apollo, 28 min.
10 Video Cassettes
TL 789.8 U5 A44 vol. 1-10

Ancient Inventions.

A&E Home Video (1997)

Describes examples of technologies found in ancient civilizations that indicate the knowledge of steam power, magnetism, and other principles centuries before they were "discovered" and exploited in more recent times as well as other technologies like the lifting of heavy stones in ancient architecture that are still not understood by modern man.

1 Video Cassette (90 min.)
T173.8 .A48 1997

Applications of Conic Sections.

Films for the Humanities (1997)

Some examples of conic sections in everyday life lead to a detailed study of two numerical applications of conic sections: parabolic versus ellipsoidal headlight designs in cars and the hyperbola-shaped path of the sonic boom of an airplane.

Video Cassette (10 min.)
QA 485 A66

Applications to Physics.

Educational Video Resources (1992)

Introduces how calculus can be applied to the study of physics.

Video Cassette (28 min.)
QA303 .A63

Asteroids and Comets: Earth's Threat from Above.

Films for the Humanities (1998)

A discussion of humankind's place in the universe and the likelihood of a collision between the earth and a large Near-Earth Object.

Video Cassette (49 min.)
QB 377 A77

Automotive advances. 1.

Chip Taylor Communications (2001)

News items about technological advances for automobiles involving in-car traffic conditions displays, rapid engineering of automobiles, safety systems for luxury cars, a three-wheeled car, manufacturing of car parts, aluminum in cars, and electric cars.

1 Video Cassette (21 min.)
TL240 .A42 2001

Automotive Design.

PBS (1990)

Nigel Bennett, famous race car designer, encourages students to "get all the math and physics you can if you want to become involved in automotive design.

Video Cassette (15 min.)
QA 10.5 F882

The Best Mind Since Einstein.

WGBH Educational Foundation

Nova presents a profile of the late Richard Feynman - atomic bomb pioneer, Nobel prize-winning physicist, acclaimed teacher and all-around eccentric.

Video Cassette (54 min.)
QC16.F49 B47 1993

Beyond the Moon: Failure is Not an Option 2.

A&E Television Networks (2005)

In 1969, the engineers of Mission Control assume that America's great push will continue: a moon base, shuttle, space station, manned flights to Mars... But as a growing number of political, social and economic problems vie for the nation's attention - and money - Congress, Presidents, and the American public is not so sure. Is manned space flight really worth the cost? Is it worth the risk? To some, answers to these questions remain unclear even today. But for legendary flight director Gene Kranz and the men and women of Mission Control, there is no doubt. Despite waning public support and shrinking budgets, they still have a job to do, a job where lives hang in the balance and there is no room for error. This video tells the little-known story of America's post-Apollo space program, from the point of view of the engineers of Mission Control. Through their experiences, we get a first hand look at life inside Mission Control, as these driven engineers continue to push the boundaries of spaceflight from 1972 into the new century.

1 videodisc (ca. 100 min.)
TL873 .B49 2005

Big Bang Theory.

MPI Home Video

Discusses new evidence found to support the big bang theory. This is the theory that the universe started from a speck of energy that exploded to form the universe.

Video Cassette (23 min.)
QB991.B54 B43 1992

Black Holes.

New River Media

Explores the origins of astronomical black holes. Explains where they come from and where they might be found.

Video Cassette (52 min.)
QB843.B55 .B584 1997

Bye Bye Planet Pluto.

Films for the Humanities & Sciences
(2006)

Describes the discovery of Pluto and looks at the scientific debate that resulted in Pluto's demotion to a minor planet.

1 videodisc (50 min.)
QB701 .B84 2006

Change and Motion: Calculus Made Clear.

The Teaching Company (2001)

24 lectures by Professor Michael Starbird of the University of Texas, Austin cover the concepts of Calculus.

Pt. 1. Tape 1.

1. Two ideas, vast implications
2. Stop sign crime : the first idea of calculus
3. Another car, another crime : the second idea of calculus
4. The fundamental theorem of calculus

Tape 2.

5. Visualizing the derivative
6. Abstracting the derivative : circles, squares, and belts
7. Derivatives the easy way
8. Galileo, Newton and baseball

Tape 3.

9. The best of all possible worlds : optimization –
10. Circles, pyramids, cones and spheres
11. Archimedes and onions --
12. The integral : a process of summing

Pt. 2. Tape 1.

13. Abstracting the integral : areas, volumes and dams
14. The fundamental theorem at work
15. Buffon's needle : pi from breadsticks
16. Zeno's arrow : the concept of limit

Tape 2.

17. Real numbers and predictability of the continuous –
18. Zeno, calculators and infinite series
19. Mountain slopes and tangent planes
20. Getting off the line : motion in space

Tape 3.

21. Physics, music, and the planets
22. Business and economics : getting rich and going broke
23. Palpitations, population, perch and pachyderms
24. Calculus everywhere

6 Video Cassettes (12 hrs 30 min.)
QA303 .C53 2001

Chasing El Nino.

WGBH (1998)

Scientists trace the ultimate weather machine with a series of information-gathering buoys stationed across 8,000 miles of the Pacific Basin.

Video Cassette (1 hr.)

GC 296.8 E4 C43

Conceptual Physics.

Addison-Wesley (1987)

Introduction (15 min.)

Newton's First Law (28 min.)

Pressure (15 min.)

Newton's Third Law (27 min.)

Relativity (29 min.)

Atmospheric Pressure (27 min.)

Evaporation & Boiling (24 min.)

Condensation (17 min.)

Waves & Sound (30 min.)

Polarized Light & 3-D Viewing (30 min.)

Electrostatics (29 min.)

Nuclear Fusion (25 min.)

12 Video Cassettes

QC 23 C65 pt. 1-12

Contact UFO: Alien Abductions.

Maljack Prod. (1991)

Investigates personal accounts of abduction by alien beings.

Video Cassette (1 hr. 30 min.)

TL 789.3 C65

Cosmic Time.

Films for the Humanities & Sciences (2007)

String field theory pioneer Michio Kaku presents this look at the cosmic landscape and its relationship to time.

1 videodisc (50 min.)

QC173.59.S65 C67 2007

Cosmos: Blues for a Red Planet.

Carl Sagan Productions (1989)

From a review of man's fascination with Mars and theories about the planet, notably those of Percival Lowell, the film turns to the exploration of Mars.

Video Cassette (1 hr.)

QB 641 B58

Cosmos: Encyclopedia Galactica.

Carl Sagan Productions (1989)

Explores the probable nature of intelligent civilizations in the universe and the means by which contact might be made. Dr. Sagan notes that the "Rosetta Stone" for interstellar communication is likely to involve the laws of physics-shared observations about the universe, such as the spectra of the elements and the constant speed of light.

Video Cassette (1 hr.)

QP 376 P47

Cosmos: Heaven and Hell.

Carl Sagan Productions (1989)

The underlying theme is the interaction of 2 diametrically opposed processes--gradualism and catastrophism--which in concert are responsible for the evolution of our universe, solar system, and life on earth. Using the Tunguska blast as a starting point, Dr. Sagan discusses meteorites and comets. A miniature solar system illustrates the hypotheses of Velikovsky, and theories about the planet Venus. The concept of comparative planetology is introduced.

Video Cassette (1 hr.)

QB 981 H37

Cosmos: Journeys in Space and Time.

Carl Sagan Productions (1989)

Computer animation places the constellations in space and explains the concept of a light year. Einstein's theory of relativity is introduced and his perceptions of space and time are illustrated. The feasibility of interstellar travel is discussed with a brief history of ideas proposed for space travel. Time travel is touched upon.

Video Cassette (1 hr.)

Q 125 B32

Cosmos: One Voice in the Cosmic Fugue.

Carl Sagan Productions (1989)

Addresses the question of life and its origins. Speculates on life in other worlds. Molecular biology, the Miller/Urey experiment, and DNA are examined.

Video Cassette (1 hr.)

QB 981 S56

Cosmos: The Backbone of Night.

Carl Sagan Productions (1989)

Dr. Sagan visits the island of Samos to explore the scientific outburst of ancient Ionian physicists. Anaximander of Miletus constructed a sun dial, a celestial globe, and a map of the known world. Empedocles made discoveries about the nature of air. Democritus posited the concept of the atom and Aristarchus began the long quest to answer the question, "What are the stars?" Science as a structured body of knowledge was born, but it declined in the wake of Pythagorean and Platonic mysticism.

Video Cassette (1 hr.)

Q 125 B32

Cosmos: The Edge of Forever.

Carl Sagan Productions (1989)

Cultural myths of human creation lead to an early history of the universe, introducing the Big Bang theory. Computer animation explains galactic formation and dynamics and a demonstration of the Doppler effect provides an understanding of the red shift of light waves. Dr. Sagan visits India to show how the Hindus seem to have arrived at conclusions approximating modern scientific cosmology, the possibility of an oscillating universe. Radio astronomy--the VLA in New Mexico--is seen as one of the new advances in technology which will contribute to further understanding of the cosmos.

Video Cassette (1 hr.)

QB 801 L58

Cosmos: The Harmony of the Worlds.

Carl Sagan Productions (1989)

The first attempts of humans to interpret the character of the heavens portrayed in the stars as a kind of extension of the familiar world. Using myths and star charts, Dr. Sagan explores how each society has peopled the heavens. A dramatic recreation of Johannes Kepler's life and work brings an understanding of efforts of Copernicus, Galileo, and Isaac Newton.

Video Cassette (1 hr.)

QB 981 H37

Cosmos: The Lives of the Stars.

Carl Sagan Productions (1989)

A discussion of the building blocks of matter leads to an explanation of the anatomy of stars and the forces that act on stellar interiors. Stellar evolution, supernovae, and neutron stars are all dealt with.

Video Cassette (1 hr.)

QB 801 L58

Cosmos: The Persistence of Memory.

From the modern view that whales represent an intelligent species, Dr. Sagan moves to the study of genetic information, the function of the human brain, brain size and behavior, relationship of brain and environment, and the physiological synaptic response.

Video Cassette (1 hr.)

QP 376 P47

Cosmos: The Shores of the Cosmic Ocean.

Carl Sagan Productions (1989)

Begins with a guided tour of the universe from clusters of galaxies to the Milky Way to Earth, landing in Egypt. Discoveries of Eratosthenes are introduced--the measurement of Earth's circumference and its spherical nature. The dawn of systematic scientific research and the Alexandrian Library are discussed. Concludes with the "cosmic calendar," a journey through time from the Big Bang to the present.

Video Cassette (1 hr.)

Book (293 p.)

QB 981 S56

Cosmos: Traveler's Tales.

Carl Sagan Productions (1989)

At NASA, Dr. Sagan and colleagues conduct an exploratory mission, the Voyager II's close encounter with Jupiter and its satellites. Actual Voyager images illustrate the explanation of how data is transmitted and processed, and the nature of the Jovian system. Space exploration in the 20th century is contrasted with exploration in the 17th century.

Video Cassette (1 hr.)

QB 641 B58

Cosmos: Who Speaks for Earth.

Carl Sagan Productions (1989)

Recalls the highlights of the first 12 episodes of the series. The great themes of Cosmos--the ideas of cosmic evolution and scientific approach, history as an exemplary teacher, and the limitedness of our particular islands of perceptions--are woven together with some cautionary warnings about the types of futures we face as a species and as a planet.

Video Cassette (1 hr.)
QB 631 W56

Countdown to the Invisible Universe.

Coronet Film & Video (198?)

In 1983, a research satellite known as IRAS provided scientists with more raw information about the universe than they had ever encountered. Translating IRAS' data into their own color-coding language, scientists have for the first time been able to catalog details of the infrared sky and accurately visualize the different temperature regions found throughout our galaxy and beyond.

Video Cassette (58 min.)
Guide (2 p.)
QB 136 C68

Creation of the Universe.

PBS (1988)

Identifies and explains some of the most challenging ideas and theories in contemporary science, including the new unified theories and a theory that the universe could have appeared spontaneously out of a perfect vacuum.

Video Cassette (1 hr. 30 min.)
QB 981 C85

Dark Circle.

Docurama (2006)

A documentary that follows the trail of plutonium from the Rocky Flats Nuclear Weapons facility in Colorado, to the Diablo Canyon Nuclear Power Plant in California, to Hiroshima and Nagasaki in Japan.

1 videodisc (ca. 82 min.)
HD9698.U62 D37 2006

The Day After Trinity.

Pyramid (1981)

Examines the life of J. Robert Oppenheimer, principle architect of the atomic bomb. Journeys through the development of the bomb, from its beginnings through the aftermath of its use on Japan. Focuses on Oppenheimer's opposition to the continued development of nuclear weapons during the McCarthy era of the 1950s.

Video Cassette (1 hr. 28 min.)
QC 774 066 D39

Daytime.

Films for the Humanities & Sciences (2007)

This video helps to answer the question: Where does our sense of time come from? Host Michio Kaku interviews the scientist who first detected the neurological stopwatch that gives us our awareness of time, meets a father and daughter whose body clocks are speeded up, and visits a gorilla in captivity who has a rudimentary sense of time.

1 videodisc (50 min.)
QP445 .D38 2007

Deadly Shadow of Vesuvius.

WGBH Boston Video (1998)

Nova explores the world of Vesuvius and other volcanoes, and tours the ruins of Pompeii. Scientists study Vesuvius to predict when it will erupt again.

Video Cassette (1 hr.)
QE523.V4 D43 1998

Death of a Star.

Coronet Film & Video (198?) Nova

Documents the discovery of Supernova 1987A, as well as the collaboration of astronomers to monitor and study this event. Records the evolution of the understanding of 1987A as seen through the eyes of the astronomers.

Video Cassette (58 min.)
Guide (2 p.)
QB 843 S95 D43

Demonstrations in Lasers and Optics.

MIT (1990)

1. Overview (34 min.)
 2. Optics: Polarization (38 min.)
 3. Optics: Dielectric Boundaries(31 min.)
 4. Optics: Two-Beam Interference (57 min.)
 5. Optics: Multiple Beam Interference (38 min.)
 6. Optics: Diffraction (52 min.)
 7. Optics: Optical Fibers (18 min.)
 8. Laser Fundamentals I (47 min.)
 9. Laser Fundamentals II (1 hr.)
 10. Laser Fundamentals III (44 min.)
- 10 Video Cassettes
TA 1675 D44 tapes 1-10

The Doomsday Asteroid.

Nova. WGBH (1995)

Scanning the skies and earth for evidence that giant rocks from outer space have struck before and will strike again.

Video Cassette (1 hr.)
QB 651 D66

Earth Explorer

WGBH/Boston (1995)

Profiles the career of geophysicist Marcia McNutt, tenured professor in earth sciences at M.I.T. Her research on the earth's geological plates centers on a critical juncture beneath Lake Mead, Nevada and the xenoliths of Tahiti.

Video Cassette (1 hr.)
QC805.M32 E27

Earth Time.

Films for the Humanities & Sciences (2007)

Host Michio Kaku leads the viewer on the topic of the progression of geological and human evolution and the time frames that dwarf human life spans.

1 videodisc (50 min.)
QE508 .E27 2007

Earthspace: The Magnetosphere.

NASA (1983?)

Solar flares causing magnetic storms on earth: what it is, how it was discovered, what has been learned about it.

Video Cassette (1 hr.)
QC 809 M35 E27

Eclipse of the Century.

WGBH (1991)

Shows the preparations of scientists in the days preceding the July 1991 eclipse. Also includes a breathtaking look at the sky's exciting event.

Video Cassette (1 hr.)
QB 544.91 E25

Einstein: The Man Behind the Genius.

Kultur (2000)

Explores Einstein's private life.
1 Video Cassette (60 min.)
QC16.E5 E364 2000

Einstein Revealed.

WGBH Boston Video (1996)

Gives a portrait of the physicist Albert Einstein as a passionate young man.

1 videocassette (111 min.)
QC16.E5 E516 1996

Einstein's Unfinished Symphony.

Films for the Humanities & Sciences (2005)

"Revolted by quantum theory, Einstein spent his final decades trying to create an all-encompassing mathematical model of the universe in which God indeed does not play dice. In this program, theoretical physicist Michio Kaku and experts from Cambridge, MIT, and elsewhere discuss Einstein's revolutionary time/space theories of 1905, the ascendancy of quantum mechanics and string theory, and Einstein's unswerving belief that the laws of nature--elegant and precise--must reveal a universe of divine predictability down to the last subatomic particle. A gripping dramatization of Einstein's last two days paints a vivid portrait of an idealistic scientist who never gave up seeking"—Container.

1 videodisc (50 min.)
QC16.E5 E52 2005

Einstein's Big Idea.

WGBH Boston Video (2005)

Einstein arrived at his 1905 discovery that the realms of matter and energy are linked. Reveals the roots of this breakthrough in the human stories of scientists Michael Faraday, Antoine Lavoisier, and Lise Meitner, whose innovative thinking helped lead to $E=mc^2$, and ultimately unleashed the power of the atom.

1 videodisc (approx. 112 min.)

QC73.8.C6 B632 2005

Einstein's Wife: The Life of Mileva Einstein-Maric.

PBS Video,(2003)

Einstein's first wife, a brilliant mathematician, collaborated with him on some of his famous works. This video uses long-hidden documents, love letters and biographies to piece together their partnership.

1 videodisc (60 min.)

QC16.E5 E527 2003

[Einstein] A. Einstein: How I See the World.

PBS Home Video ; Atlanta, GA : Turner Home Entertainment, 1995

Chronicles how the world's most famous Nobel Prize winner, scientist Albert Einstein, became its most eloquent advocate for peace. News films show the public figure, home movies reveal the private man, and much of the film is told in Einstein's own words, which have been excerpted from his diaries, personal letters and writings.

Video Cassette (56 min.)

QC16.E5 A412 1995

Electron/Photon Interactions.

University of Nevada Las Vegas (1988)

By Steven Barile & James Barker.

Video Cassette (30 min.)

QC 173 P56

The Elegant Universe.

Boston Video (2003)

Physicist Brian Greene discusses the historical quest for a grand unified theory in physics that will reconcile quantum physics and general relativity, and considers the possibility that superstring theory may bring an end to that search.

2 videodiscs (180 min.)

QC794.6.S85 G752 2003

Endeavour.

Public Media Education (1994)

Dr. Mae Jemison talks about life aboard the space shuttle Endeavour and how she realized her dream of becoming a NASA astronaut.

Video Cassette (30 min.)

TL 788.5 E53

Environment: Nuclear Power.

Diana Wyllie Ltd.

Unit 1: Harnessing the Atom; Unit 2: Radioactivity and the Nuclear Fuel Cycle; Unit 3: Fast Breeder Reactors and the Nuclear Economy.

Notes for Each Unit.

44 Slides (ca. 48/unit)

3 Cassettes

TK 9145 N8

Eyes in the Sky.

Discovery Video (1995)

Satellites have a new role in commercial, scientific and environmental applications that make us even more dependent on their watchfulness. Takes an in-depth look at the satellites that watch over us.

Video Cassette (1 hr. 40 min.)

TL 796 E84

Fast Cars.

Nova. WGBH (1995)

Follows a racer and engineers as they design a faster car. Insights from top drivers.

Video Cassette (1 hr.)

TL 236 F37

Faster Than Sound.

WGBH Boston Video, (1997)

Chronicles the events leading up to the designing of planes that could break the sound barrier without going out of control, interviewing the designers, engineers and pilots who helped achieve supersonic flight.

1 Video Cassette (60 min.)

TL571 .F37 1997

The Fire Below Us: Remembering Mount St. Helens.

Global Network Prod. (1990)

Devastation footage combined with reenactments show what it was like to live through the eruption.

Video Cassette (68 min.)

Guide (12 p.)

QE 523 S23 F572

Flight to the Moon.

Films for the Humanities (1989)

Covers the Apollo Project. Shows many of the historic elements of the moon landings and ends with the Apollo-Soyuz docking.

Video Cassette (28 min.)

TL 789.8 U6 A535

Flying the Blimp.

WGBH (1990)

Revisits the early years of blimps. Boards the luxury cabin of the Hindenburg. Introduces entrepreneurs as they launch a new breed of blimp. Glimpses of "The Whale", a cyclocrane, and the world's largest hot-air dirigible in tropical French Guiana.

Video Cassette (1 hr.)

TL 656.2 B55

For All Mankind.

Criterion Collection (1999)

A look at America's first manned flights to the moon told by the 24 men who traveled to the moon and using the images from their experiences.

1 videodisc (79 min.)

TL 789.8 U6 A5246 1999

Freeman Dyson. Glorious Accident.

Films for the Humanities (1994)

An interview with Freeman Dyson, a physicist with a particular interest in mathematics, nuclear and astro physics.

Video Cassette (1 hr. 30 min.)

Q 171 G56 no. 5

From CAD to Success Story.

Films for the Humanities (1992)

Traces the development of a new BMW automobile, from design and construction to its availability to the public.

Video Cassette (44 min.)

TL 240 F76

From the Earth to the Moon

HBO Video, [2005]

disc 1: pt. 1. Can we do this? pt. 2. Apollo one pt. 3. We have cleared the tower

disc 2: pt. 4. 1968 pt. 5. Spider pt. 6. Mare tranquillitatis

disc 3: pt. 7. That's all there is pt. 8. We interrupt this program pt. 9. For miles and miles

disc 4: pt. 10. Galileo was right ; pt. 11. The original wives' club pt. 12. Le voyage dans la lune

disc 5: Bonus features

5 videodiscs (ca. 720 min.)

PN1995.9.A3 F76 2005

Galileo.

Kultur

Story of the Italian astronomer and mathematician who dared to challenge the accepted teachings of his day. Includes comment and interpretation by historians Les Prince and Joel Roderick.

Video Cassette (50 min.)

QB36.G2 G317 2001

Galileo: A Dialog on Science, Mathematics, History and Drama.

Mathematical Sciences Research Institute (1999)

A dialogue between the mathematician Robert Osserman, G.V. Coyne, S.J., Director of the Vatican Observatory, and Galileo performed by Michael Winters in an excerpt from the Life of Galileo, a new English version by playwright David Hare of the play by Bertolt Brecht.

1 Video Cassette (50 min.)
+ 1 sheet ([3] p.)
QB36.G2 G3173 1999

Galileo's Battle For The Heavens.

WGBH Boston Video (2000)

Dramatization of Galileo Galilei's life, including his scientific achievements and his defense of his controversial theory that the earth revolves around the sun. Also discusses how letters from his illegitimate daughter, Maria Celeste, a cloistered nun, have shed new light on Galileo's discoveries and his trial for heresy.

Video Cassette (114 min.)
QB36.G2 G64 2002

Galileo's "Dialogue".

Films for the Humanities & Sciences, (2003)

"It is said that the apple fell on Newton's head, but it was Galileo who planted the tree. This program examines, The Dialogue--arguably the most controversial book of its time--and the tumultuous events revolving around Galileo's visionary scientific achievements. The insights of Harvard University's Owen Gingerich, emeritus professor of the history of science; George Coyne, director of the Vatican Observatory; and others, plus dramatizations of scenes from the book and Galileo's trial, capture the intellectual fervor of the Scientific Revolution and the Church's struggle to discourage acceptance of Copernican cosmology."--Container.

1 videodisc (ca. 53 min.)
QB41.G178 G34 2003

A Glorious Accident: Understanding Our Place in the Cosmic Puzzle.

Films for the Humanities (1994)

Scientific thinkers talk about their thoughts and their questions on man's place in the cosmic puzzle. Then they come together to have a discussion.

1. Oliver Sacks
2. Rupert Sheldrake
3. Daniel C. Dennett
4. Stephen Toulmin
5. Freeman Dyson
6. Stephen J. Gould
7. pt. 1 Clash of minds
8. pt. 2 Clash of minds

8 Video Cassettes (90 min ea)
Q171 .G56

Heart of Antarctica: End of the Earth.

TMW Media Group (1998)

Journey to the South Pole, hunt for meteorites among ice fields, and learn why Antarctica can help us study outer space.

Video Cassette (20 min.)
G 860 E53

The Hubble Space Telescope.

Astronomical Society of the Pacific (1990)

Includes material about HST deployment, the mirror problem, and the results.

25 Slides
Booklet (39 p.)
QB 500.268 H55

In the Shadow of the Moon.

Lionsgate, c2007

Presents the story of NASA's Apollo program and the lunar landings by American astronauts made between 1968 and 1972. Features rare archival footage and interviews with surviving astronauts.

1 videodisc (110 min.)
TL799.M6 I5 2007

An Interview with David Bohm.

Mystic Fire Video (1994)

Bohm discusses his groundbreaking theory of wholeness and the implicate order, in which he proposes a new model of reality that is a revolutionary challenge to physics.

Video Cassette (52 min.)
QC 174.12 I57

Introduction to Strengthening Materials.

Penn State (1975)

Depicts four methods of strengthening materials using aluminum as an example.

Video Cassette (6 min.)

TA 409.3 I57

Ionizing Radiation.

Teaching Films Inc. (198?)

1: Scientific Background (26 min.)

QC 475 S38

2: Units Used in Radiation Protection (53 min.) QC 795.42 U55

3: Principle Types of Hazard (73 min.) QC 475 P75

4: Protection from the External Radiation Hazard (21 min.)

TK 9152 P76

5: Measuring External Hazard (61 min.) QC 786 M43

5 Video Cassettes

The Joy of Science.

Teaching Company, c2001

English novelist and scientist C. P. Snow classed certain scientific ideas with the works of Shakespeare as things every educated person should know. The lectures in this series explore the fundamental discoveries and principles of the physical and biological sciences--physics, genetics, biology, astronomy, chemistry, meteorology, thermodynamics, and more--providing a comprehensive and integrated introduction to all of science. The Joy of Science, through enhancing an understanding of the physical world, offers a source of endless wonder and intellectual joy.

pt. 1. disc 1. Lecture one The nature of science ; lecture two The scientific method ; Lecture three The ordered universe ; Lecture four Celestial and terrestrial mechanics ; Lecture five Newton's laws of motion ; Lecture six Universal gravitation -- disc 2. Lecture seven The nature of energy ; Lecture eight The first law of thermodynamics ; Lecture nine The second law of thermodynamics ; Lecture ten Entropy ; Lecture eleven Magnetism and static electricity ; Lecture twelve Electricity.

pt. 2. disc 3. Lecture thirteen Electromagnetism ; Lecture fourteen The electromagnetic spectrum, pt. I ; Lecture fifteen The electromagnetic spectrum, pt. II ; Lecture sixteen Relativity ; Lecture seventeen Atoms ; Lecture eighteen The

Bohr atom -- disc 4. Lecture nineteen The quantum world ; Lecture twenty The periodic table of the elements ; Lecture twenty one Introduction to chemistry ; Lecture twenty two The chemistry of carbon ; Lecture twenty three States of matter and changes of state ; Lecture twenty four Phase transformations and chemical reactions.

pt. 3. disc 5. Lecture twenty five Properties of materials ; Lecture twenty six Semiconductors and modern microelectronics ; Lecture twenty seven Isotopes and radioactivity ; Lecture twenty eight Nuclear fission and fusion reactions ; Lecture twenty nine Astronomy ; Lecture thirty The life cycle of stars -- disc 6. Lecture thirty one Edwin Hubble and the discovery of galaxies ; Lecture thirty two The big bang ; Lecture thirty three The ultimate structure of matter ; Lecture thirty four The nebular hypothesis ; Lecture thirty five The solar system ; Lecture thirty six The Earth as a planet.

pt. 4. disc 7. Lecture thirty seven The dynamic earth ; Lecture thirty eight The plate-tectonics revolution ; Lecture thirty nine Earthquakes, volcanoes, & plate motions today ; Lecture forty Earth cycles: Water ; Lecture forty one The atmospheric cycle ; Lecture forty two The rock cycle -- disc 8. Lecture lecture forty three What is life? ; Lecture forty four Strategies of life ; Lecture forty five Life's molecular building blocks ; Lecture forty six Proteins ; Lecture forty seven Cells: The chemical factories of life ; Lecture forty eight Gregor Mendel, founder of genetics

pt. 5. disc 9. Lecture forty nine The discovery of DNA ; Lecture fifty The genetic code ; Lecture fifty one Reading the genetic code ; Lecture fifty two Genetic engineering ; Lecture fifty three Cancer and other genetic diseases ; Lecture fifty four The chemical evolution of life -- disc 10. Lecture fifty five Biological evolution: A unifying theme of biology ; Lecture fifty six The fact of evolution: the fossil record ; Lecture fifty seven Charles Darwin and the theory of natural selection ; Lecture fifty eight Ecosystems and the law of unintended consequences ; Lecture fifty nine The ozone hole, acid rain, and the greenhouse effect ; Lecture sixty Science: the endless frontier

10 videodiscs (1800 min.) + 1 course guidebook 331pgs

Q171 .H39 2001 pt.1-5

Life Beyond Earth.

PBS Home Video : Warner Home Video

The story of the search for extraterrestrial life is told in this two-part film by Timothy Ferris who combines new discoveries about the origins of life with recent revelations about the nature of the sun's planets to seek possible answers.

Part 1- investigates the origins of life on earth and traces the search for life on other worlds. (1 hr.)

Part 2- examines the strategies being employed to communicate with fellow travelers among the stars. (1 hr.)

Video Cassette
QB54 .L47 1999

Life Time.

Films for the Humanities & Sciences
(2007)

Like other living things, humans are programmed to die. This film examines the body's biological mechanisms which eventually slow down and stop. Host Michio Kaku looks at how medicine may one day reverse the effects of time on the human body.

1 videodisc (50 min.)
QH528.5 .L54 2007

Light of the 21st Century.

BBC-TV (1979)

Lasers have grown into a billion dollar business, with significant impact on medicine, dentistry, construction, communication and other areas of human concern. A giant laser in a lab in Calif. has achieved temperatures of the center of the sun, a step towards harnessing nuclear fusion. In the field of communications engineers predict laser telephone traffic can be increased a million-fold.

Video Cassette (1 hr.)
TK 7871.3 L53

Lightning!

NOVA (1995)

Takes you on a high voltage trip into the most electrically charged weather in the world. Visits some of lightning's tragic victims.

Video Cassette (1 hr.)
QC 966 L533

L-5 Promoting Space Development.

L5 Society (198?)

STS-1, STS-3, STS-6 post-flight press conferences (16 min. ea.); Introduction to the L-5 Society (40 min.); L-5 Society public service announcement (30 sec.); NASA Aeronautics and space reports on space colonization (5 min.) and space solar power (5 min.); Zero gravity gymnastics (7 min.); Jupiter and Saturn rotation films (14 min.)

Video Cassette (2 hr.)
TL 787 L38

Looking Back to the Future: Raymond Loewy.

PBS (1988)

His creations include the locomotive, company logos, cars, boats, pencil sharpeners, refrigerators, sewing machines, the interior of Air Force One, Skylab space station, and the Concorde.

Highlights his life, work, and philosophical views.

Video Cassette (1 hr.)
TS 140 L63 L66

The Majestic Clockwork

Time-Life Video/Ambrose Video (1988?)

Focuses on the contributions of Newton and Einstein in the evolution of physics by exploring the revolution that ensued when Einstein's theory of relativity upset Newton's description of the universe.

Video Cassette (52 min.)

QC7 .M33

The Mauna Kea: On the Verge of Other Worlds.

PBS (1989)

Reveals the exciting developments in astronomy at Mauna Kea. Highlights recent discoveries and special projects at the observatory including a study of light from the farthest reaches of the universe.

Video Cassette (1 hr.)

QB 82 U62 M38

The Mechanical Universe.

The Annenberg/CPB Project (1985)

1. Introduction to The Mechanical Universe
2. The Law of Falling Bodies
3. Derivatives
4. Inertia
5. Vectors
6. Newton's Laws
7. Integration
8. The Apple and the Moon
9. Moving in Circles
10. The Fundamental Forces
11. Gravity - Electricity - Magnetism
12. The Millikan Experiment
13. Conservation of Energy
14. Potential Energy
15. Conservation of Momentum
16. Harmonic Motion
17. Resonance
18. Waves
19. Angular Momentum
20. Torques & Gyroscopes
21. Kepler's Three Laws
22. The Kepler Problem
23. Energy and Eccentricity
24. Navigation in Space
25. From Kepler to Einstein
26. Harmony of the Spheres

10 Video Cassettes (30 min. per program)

QC 127.3 M42

The Mechanical Universe and Beyond.

Annenberg/CPB Collection (1988)

27. Beyond the Mechanical Universe
28. Static Electricity
29. The Electric Field
30. Potential and Capacitance
31. Voltage, Energy, & Force
32. The Electric Battery
33. Electric Circuits
34. Magnetism
35. The Magnetic Field
36. Vector Fields & Hydrodynamics
37. Electromagnetic Induction
38. Alternating Current
39. Maxwell's Equations
40. Optics
41. The Michelson-Morley Experiment
42. The Lorentz Transformation
43. Velocity & Time
44. Mass, Momentum, Energy
45. Temperature & Gas Laws
46. Engine of Nature
47. Entropy
48. Low Temperatures
49. The Atom
50. Particles and Waves
51. From Atoms to Quarks
52. The Quantum Mechanical Universe

13 Video Cassettes (2 programs per tape, 30 min. per program)

QC 127.3 M42

Meteorites.

ORF (1993)

Filled with computer graphics, pictures from Voyager II, and footage of ancient meteor craters and specimens from around the world. Tells a story of science, legend, myth, and wonder.

Vol. 1: Menace from the Sky.

Vol. 2: Witnesses from Beyond the Times.

2 Video Cassettes (1 hr. 24 min.)

QB 755 M483 pt. 1-2

Modern Marvels: The Space Shuttle.

A&E Television Networks (2004)

The development of the Shuttle began in the 1950's and was triumphantly launched in 1981. This program examines the successes and failures of the missions and looks at the next generation Space Shuttle, the futuristic X-33.

1 videodisc (ca. 50 min.)

TL795.5 .M63 2004

Monsters of the Deep.

MPI Home Video (1996)

Visits the Florida residents who survived 1992's hurricane Andrew, the United States' costliest natural disaster; examines the causes of hurricanes; and delves into the phenomenon known as "El Niño," a current in the Pacific Ocean with far-reaching effects on weather.

Video Cassette (57 min.)

QC944 .M65

The Moon Kit.

Astronomical Society of the Pacific (1990)

An introduction to the moon.

18 Slides

Booklet (23 p.)

QB 581 M67

Newton: A Tale of Two Isaacs.

Devine Entertainment (1999)

A dramatization of the life of physicist Sir Isaac Newton as told by a young boy named after him. Thus the tale of the two Isaacs is interwoven throughout the story.

Video Cassette (52 min.)

QC16.N7 N46 1999

Newton's Dark Secrets.

WGBH Boston Video (2005)

Newly discovered manuscripts reveal an Isaac Newton obsessed with religion, the occult, and alchemy.

1 videodisc (56 min.)

QC16.N7 N478 2005

[Newton] Sir Isaac Newton: The Gravity of Genius.

A&E Home Video; New Video Group

Explores the life of Sir Isaac Newton, who invented calculus, investigated motion, gravity, and light, and who was the father of modern science. Includes an examination of his writings and interviews with scholars and scientists.

Video Cassette (50 min.)

QC16.N7 S57 1996

El Nino: Disaster on the Wind.

Films for the Humanities (1998)

Meteorologists provide in-depth, scientific explanations for El Nino, while tracing its damaging effects and positive legacy. Also examines new technologies in weather satellites and sophisticated underwater probes.

Video Cassette (35 min.)

GC 296.8 E4 U53

Nobel lectures. Physics, 1901-1995

World Scientific (1999)

DVD

QC71 .N63 1999

Optics.

PBS (1990)

Takes the viewer inside Bell Laboratories, Lasermedia and the University of Arizona's Optical Sciences Center to meet astronomer Dr. Roger Angel.

Video Cassette (15 min.)

QA 10.5 F882

Origins: Fourteen Billion Years of Cosmic Evolution.

WGBH Boston Video (2004)

"Who would have predicted that a hot spot left over from the Big Bang would eventually lead to our galaxy, the solar system, the Earth, - and to us? Origins explores how the universe and our planet began amid chaos and eventually gave birth to the first stirrings of life"—Container.

disc 1 -- Earth is born -- How life began

disc 2 -- Where are the aliens? -- Back to the beginning

2 videodiscs (ca. 240 min.)

QB981 .O74 2004

Paul Jacobs and the Nuclear Gang.

Distributed by the Cinema Guild (2005)

Reporter Paul Jacobs investigated the health effects of exposure to low-level radiation on soldiers and civilians who participated in atomic bomb tests in the Nevada desert.

1 videodisc (68 min.)

PN4874.J33 P28 2005

Physics of Spaceflight.

Physics Curriculum & Instruction (1991)

1. Acceleration Machines. Illustration of some of the principles governing the launching of a spacecraft. (32 min.)

TL 790 A22

2. Orbital Motion and Re-entry.

Illustration of some of the dynamics of orbital motion and of the atmospheric re-entry of space vehicles. (30 min.)

TL 790 P48

3. Gravity: A Broadened View.

Illustration of the principle of gravity as it applies to space flight. (30 min.)

TL 790 G73

3 Video Cassettes

Planet Earth.

Annenberg/CPB Collection (1986)

1. The Living Machine

QE 511.4 P47

2. The Blue Planet GC 21.5 P53

3. The Climate Puzzle QB 631 P53

4. Tales from Other Worlds

QB 501 P53

5. Gifts from the Earth

QE 511.4 P472

6. The Solar Sea QB 631 P532

7. Fate of the Earth QB 631 P533

See summaries in the Science section.

7 Video Cassettes (1 hr. ea.)

Planets.

DK Vision : BBC Worldwide Americas

Journey through space and time,

witnessing the birth of the sun and traveling to the outer limits of the solar system.

Video Cassette (35 min.)

QB601.9 .P54 1997

The Prevailing Westerlies, the Horse Latitudes, and the Doldrums: Global Air Circulation.

Blue Sky Asso. (1992)

Explains world air circulation patterns.

Video Cassette (1 hr.)

QC 880.4 A8 P74

Putting Man in Space.

PBS (1990)

Takes viewers through Johnson

Space Center in Houston to demonstrate how much math is fundamental to our ability to operate in outer space.

Video Cassette (15 min.)

QA 10.5 F882 pt. 6

The Quantum Universe.

PBS (1990)

Explores the world of quantum physics as seen through the eyes of scientists and artists. Visits the high-energy particle physics facility at the Harvard-Smithsonian Center for Astrophysics and discusses the horizons of modern quantum theory.

Video Cassette (1 hr.)

QC 174.12 S64

Race for the Superbomb.

WGBH-TV

Discusses the development of the hydrogen bomb and the possibility of nuclear warfare.

Video Cassette (1 hr. 55min.)

UG1282.A8 R33 1999

The Race To the Moon.

A&E Television Networks (2004)

Join the History Channel for the ultimate 35th birthday celebration of one of the most extraordinary events of the 20th century, in this incomparable collector's commemoration of the moonwalk and the early days of the space race.

v. 1. Failure is not an option.

v. 2. Code name Project

Orion ; Modern marvels : Apollo 13 ; Modern marvels : the space shuttle.

2 videodiscs (232 min.)

TL799.M6 R33 2004 1-2

The Radicals.

Vision Video

The story of the beginnings of the Anabaptist movement in 16th century Europe. Neither Catholic nor Protestant, radical reformers refused ties to the state and offered the world a new vision.

Video Cassette (1 hr. 39 min.)

PN 1995.9 R4 R33

The Rainbow.

Films for the Humanities (1997)

Uses mathematical modeling to explain how light produces color in rainbows.

Video Cassette (25 min.)

QC 976 R2 R33

The Really Big World of Astronomy.

Cerebellum Corporation (1997)

Series: Standard Deviants Video Course Review. Video study aid for college astronomy courses.

2 Video Cassettes (2 hrs 50 min)

QB 44 R42 pt 1-2

Richard Rodriguez & Sir John Houghton.

Films for the Humanities & Sciences (2006)

Richard Rodriguez speaks about spirituality, mortality, and growing up in a Catholic family and community that were often at odds with Protestant-dominated America. Sir John Houghton speaks as a scientist and evangelical Christian. He explains his belief that science and religion can both work towards improving the human condition.

1 videodisc (57 min.)

F870.M5 R53 2006

Ring of Truth.

PBS (1987)

Shows how science knows what it knows, moving from the time of Galileo to the modern era of quantum mechanics and astrophysics. Philip Morrison stresses the actual hands-on experiences of gathering and evaluating scientific evidence and invites viewers to participate actively.

1. Looking
2. Change
3. Mapping
4. Clues
5. Atoms
6. Doubt

6 Video Cassettes (1 hr. each)

Q 175 R46 pt. 1-6

Rock 'n Roll Physics.

Public Media Education (1995)

Two high school physics teachers challenge students to figure out the physics of amusement park rides.

Video Cassette (30 min.)

QC 6 R56

The Rocky Road to Jupiter.

Coronet Film & Video (198?) Nova

Takes a behind-the-scenes look at the people who build spacecraft and design missions. The pre-Challenger successes of the U.S. planetary space program are examined along with the role the shuttle has played in shaping U.S. space policy.

Video Cassette (58 min.)

Guide (2 p.)

QB 661 R63

Roller Coaster!

WGBH Foundation (1993)

Explores the design and construction of roller coasters and how physics principles apply to roller coasters.

Video Cassette (56 min.)

GV 1860 R64 R64

Runaway Universe.

WGBH Boston Video (2000)

Discusses the mysterious force that is pushing the universe apart. Also discusses the size of the universe and what a supernova looks like.

Video Cassette (1 hr)

QB991.E94 R85 2000

Sail On, Voyager.

Vestron Video (1992)

Shares some of the photographs and findings brought back by the two Voyager spacecrafts as they traveled over four billion miles in space.

Video Cassette (58 min.)

TL 789.8 U6 V687

The Satellite Sky.

PBS (1990)

Provides a history of the space exploration era by assembling layer upon layer of archival materials including kinescopes, American films, Russian science fiction movies, Russian commercials, and U.S. and Soviet news footage.

Video Cassette (1 hr.)

TL 788.5 S28

Savage Skies.

MPI Home Video (1996)

Explores the power and beauty of the world's most severe weather.

Fire and Rain explores the deceptive disguises worn by rain and the effects it has on people around the globe. (55 min.)

QC 925 F57

Riders in the Storm follows some of the individuals who hunt for twisters and storms, attempting to predict their behavior. (59 min.)

Monsters of the Deep visits with survivors of Hurricane Andrew and examines the ocean effects that create hurricanes. Delves into the phenomenon known as "El Nino". (57 min.)

The Winter's Tale takes viewers to winter locations and demonstrates the manner in which humans have adapted their lifestyles to the vigorous demands of winter. Looks at history's biggest blizzards. (58 min.)

4 Video Cassettes

Science in focus: energy.

Annenberg/CP (2002)

Workshop for science teachers on understanding the concept of energy including distinguishing between the meaning of energy to the man on the street and its meaning to scientists, and energy's role in motion, machines, food, the human body, and the universe as a whole. Also discusses how energy can be converted from one form to another and transferred across time and space and the conservation of energy

8 Video Cassette (ca. 480 min.)

1 guide (32 p.)

QC73.6 .S35 2002 no.1 – 8\

Solar Blast.

National Geographic Television in cooperation with PBS

Solar blast refers to the sun's sphere of superheated gas powered by nuclear fusion and erupting into storms. We need to understand and predict this phenomenon because of potential disruptions on earth. High altitude ice cores are one means of studying the history of earth's climate and environment. Chemistry of this ice reveals a connection between eleven year sun cycles and earth climate. At present solar researchers can give only an hour warning before a solar blast strikes earth.

Video Cassette (57 min.)

QC883.2.S6 S58 2000

Sputnik Declassified.

WGBH Boston Video, c2008

On October 4, 1957, the space age dawned with the red hue of the Communist flag when the Soviet Union launched the first artificial satellite. Sputnik stunned the world and spurred the U.S. into massive spending on science education and innovation. Fierce political and personal rivalries collided over how and when the U.S. should enter space. President Eisenhower wanted a satellite to spy on the Russians but feared their response to an overtly military program. That led him to sideline the plans of Wernher von Braun, the leader of the U.S. Army's pioneering rocket team.

1 videodisc (ca. 56 min.)

TL796.5.R8 S68 2008

Stationed in the Stars.

BBC Worldwide Americas (2000)

Even as astronauts from around the world work on constructing the International Space Station, the future of the project is in doubt. Russia has failed to deliver a crucial piece, stalling construction. Russia has plans to turn its Mir space station into a vacation spot and commercial lab, which may impact its participation in the building of the International Space Station.

Video Cassette (1 hr.)

TL797 .S73 2000

Super Bridge.

WGBH Boston Video (1997)

Follows the four-year construction of the Clark Bridge, spanning the Mississippi River at Alton, Illinois. It is a rare example of what is known as cable-stayed design, an innovative variation on the suspension bridge.

Video Cassette (2 hrs)
TG405 .S86 1997

Synchronicity and the Holographic Universe.

Thinking Allowed Prod. (1992)

In part one Michael Talbot discusses the holographic model of brain functioning and the "implicate order" model of quantum physics. He proposes that these two models combine to explain many unsolved mysteries in brain functioning and quantum physics. In part two, Talbot discusses his own unusual experiences with poltergeist phenomena and UFOs. Suggests that the holographic model provides a means for understanding these experiences.

Video Cassette (1 hr. 30 min.)
QC 449 S98

Taking Off.

We Do The Work (1996)

Deregulation of the airline industry has led to cost-cutting of airplane parts and repair and maintenance of smaller airlines mostly, however, bogus airplane parts have been sold to major airlines as well. The FAA has compromised the safety of many airlines by changing the rules (FAR 145) and permitting airplanes to be repaired outside the United States in third world countries where the mechanics are not subject to the same licensing regulations as their American counterparts, and FAA inspections are fewer and farther between at "offshore" facilities.

Video Cassette (30 min.)
HE9763 .T33 1996

Terror in Space.

WGBH Educational Foundation (1998)

Exposes the dangers and near disasters aboard the Russian space station Mir in 1997. Includes interviews with U.S. astronauts Jerry Linenger and Michael Foale.

Video Cassette (1 hr.)
TL797 .T47 1998

To Engineer is Human.

Films Inc. (1990)

Shows how engineering science is subject to human limitations. Using graphic footage of some of the world's major civil failures, illustrates some of the greatest disasters in history.

Video Cassette (50 min.)
TA 174 T62

To the Moon.

WGBH Video, c2000

Presents the story behind the Apollo space program, including the historic walk on the moon in 1969.

DVD (2 hrs)
TL789.8.U6 A5277 2000

Today's Physicist: The Fire that Burns Within.

Alfred P. Sloan Foundation (1997)

Features ten physicists who possess a variety of degrees and work for industrial, academic, and government employers. Mechanical engineers talk about careers for mechanical engineers, including what types of work mechanical engineers perform in business and industry, the challenges and opportunities in mechanical engineering and opportunities outside of engineering for other jobs.

Video Cassette (50 min.)
QC29 .T63

Tornado!

WGBH (1985)

Follows a chase team of scientists as they pursue nature's most destructive and elusive weather phenomenon.

Video Cassette (60 min)
QC955 .T66

Tornado Video Classics.

Tornado Project (19)

Descriptions of major tornadoes in the U.S. Information on tornado forecasting, formation, life cycles, and multiples vortices.

Video Cassette (2 hr.)
Guide (48 p.)
QC 955.5 U6 T67 tape 1

Tornado Video Classics II: The Magnificent Puzzle.

Tornado Project (1992)

Depicts the puzzling climatology of tornadoes ... the where, when, and how often of tornadoes. Enhances the understanding of the immediate and long term risks from tornadoes.

Video Cassette

Guide (8 p.)

QC 955.5 U6 T67 tape 2

Transportation Advances. 1

Chip Taylor Communications (2001)

Presents advances in transportation such as a portable airplane that carries two people and fits in a standard garage, a moving map display for pilots based on the Global Positioning System, a jet that is the smallest 4-seater aircraft in the world, a model aircraft that requires no experience to control it, and advances in fire-resistant materials to be used in planes, trains, and cars.

Video Cassette (24 min.)

TL545 .T73 2001

Turning Points in the Physical Sciences.

Ambrose Video Pub. (2005)

A journey of discovery from ancient through classical science to the world of modern physics, relativity, chaos theory and quantum mechanics.

See online catalog for contents.

5 videodiscs (135 min.)

Q158.5 .T87 2005 1-5

21st Century Jet: The Building of the 777.

PBS Video (1996)

Covers the pioneering computer design methods used for the 777. Follows the group that designs and tests the plane.

To Design a Plane

The Sum of Its Parts

A Plane Takes Shape

Taking Flight

Countdown to Delivery.

5 Video Cassettes (5 hr.)

TL 686 B65 A22 pt. 1-5

Understanding : Time.

Discovery Channel Education (2001)

Teaches the history of time and the math and science of it. Also discusses time travel and Einstein's theory of relativity.

1 Video Cassette (ca. 27 min.)

QB209 .U53 2001

Units Used in Radiation Protection.

Teaching Films (1984)

Describes how to measure radiation activity, energy, exposure and dose and explains the properties of radiation.

Video Cassette (20 min.)

QC795.42 .U55

The Universe. The Complete Season One.

A&E Television Networks (2007)

Part 1: Tour the surface of Earth's life-giving star. Mars may be the future of humanity - uses data collected from probes and robotic rovers. Scars on the planet's surface and in its fossil record illustrate the threat posed by meteorites, comets, and asteroids that routinely collide with Earth. Two and a half times the size of all the other planets in the solar system combined, and half a billion miles from Earth, Jupiter is a colossal riddle

Part 2: Our closest celestial neighbor, the moon is the only cosmic body on which human beings have ever set foot. Learn how the place we call home formed in one of the most volatile regions of the Milky Way. Circling around the Sun in speedy orbits, Mercury and Venus are rocky, dense, and intensely hot.

Part 3: Famous for its striking ring formations, Saturn is perhaps the most beautiful planet in the solar system. The Milky Way is only one of the over 100 billion galaxies thought to exist, and each is composed of as many as a trillion stars. The birth of a star is a spectacular event, as gravity brings together massive molecular clouds over millions of years to create these enormous galactic furnaces. The gargantuan planets Jupiter, Saturn, Uranus, and Neptune circle the edge of the Solar System.

Part 4: Gazing up from Earth, the Universe looks like a peaceful place where placid stars pass across the night sky. Could there be other intelligent life outside our solar system, with the space suggests that the conditions for the life may not be unique to Earth. Over 13 billion years ago, from a point smaller than the size of a single atom the universe was born, and it continues to expand with every passing second.

4 videodiscs (ca. 705 min.)

QB981 .U555 2007 1-4

Venus Unveiled.

WGBH (1995)

Venus reveals its true face to the spacecraft Magellan, turning out to be one of the most bizarre places in the solar system.

Video Cassette (1 hr.)

QB 621 V55

Volcano!

Coronet (1989)

Focuses on the microgravity techniques used to predict volcanic eruptions. The field methods of Professor Brown and Dr. Hazel Rymer in Costa Rica & Ireland and interpretations of the data collected in their studies are presented.

Video Cassette (58 min.)

Guide

QE 527.5 V64

Volcanoes of the Deep.

WGBH Boston Video (1999)

Discusses how sea life thrives on the ocean floor on superheated volcanic chimneys and shows a mission to use a submersible to bring volcanic chimneys to the surface.

Video Cassette (1 hr.)

GC87.6.V64 V64 1999

Weather Extreme. Tornado.

Artisan Home Entertainment (2001)

Discusses the potential impact of really bad tornados on crowded metropolitan areas. Includes footage from past disastrous storms, eyewitness accounts, and computer animation

1 Video Cassette (55 min.)

QC955 .W42 2001

When We Left Earth: The NASA Missions.

Discovery Communications, [2008]

Chronicles NASA's history, including the Mercury program, moon landings, and the first untethered space walk.

3 videodiscs (ca. 258 min.)

TL789.8.U5 W44 2008

World Within World.

Ambrose Video (1974/ 1988)

Looks at the internal structure of the atom and traces the history of 20th-century physics.

Video Cassette (52 min.)

QC7 .W67

Worlds in Comparison.

Astronomical Society of the Pacific
(1988)

Describes the size relationships in the solar system. Compares planets, satellites, and some of their most prominent geographical features.

20 Slides

Booklet (19 p.)

QB 501.2 M47