

Physics and Film Series

50 Films List

1. The Day the Earth Stood Still (1951) Dir. Robert Wise

Director Robert Wise's classic from the early 1950's is not only one of the greatest science fiction films of all time, but also a powerful anti-war message film. Released at the height of The Cold War, this cautionary tale employs the science fiction genre to explore the true danger nuclear escalation poses to the entire planet. Klaatu, a dignified alien who comes to Earth to preach pacifism, ends up getting shot by a spooked infantryman within minutes of his arrival. Over the course of the film, Klaatu and his robot sidekick proceed to prove their superior power to the world by bringing all machinery to a halt for one hour (hence the film's title). Voted to the Congressional Film Registry in 1995.

2. 2001 A Space Odyssey (1968) Stanley Kubrick

The quintessential modern science fiction film. Stanley Kubrick's epic masterpiece ushered in the era of truly realistic special effects, made the concept of routine space travel appear plausible, and permanently changed how audiences view science fiction films. Shifting between the clinically realistic and the fantastically expressive, this somber tale of man's lonely journey into the unknown and the ultimate search for his origins, also chillingly refined and updated the paranoid plot of intelligent machines gone awry, featuring the now famous and creepily-voiced computer villain, HAL. Nominated for four Academy Awards, it won the Oscar for Best Special Effects, and was also inducted into the Congressional Film Registry.

3. Blade Runner (1982) Ridley Scott

With its dark and mesmerizing production design, Scott's masterpiece emerged as most important science fiction film of the 1980's, establishing the tone for the more somber and thoughtful sci-fi fare that would emerge in the decade. Adapted from master sci-fi scribe Phillip K. Dick's short story, the film explored themes of seemingly emotionless replicants longing for community, bio-engineering gone awry, and the role memory plays in creation of identity. The film ultimately asks this question: "What does it mean to be human?" and leaves the audience spellbound in the process. Nominated for two Academy Awards for Art Direction and Special Effects, and inducted into the Congressional Film Registry.

4. Things to Come (1936) William Cameron Menzies, Great Britain

The visionary writer H.G. Wells penned this grim vision of a future dominated by global war, destruction, and ultimately, scientific achievement. Featuring remarkable special effects for its time, this film also unveiled many brilliant concepts such as gigantic video screens, flying cars, people-moving monorails, the first manned spacecraft to the moon, and artificial sunlight, and has influenced modern sci-fi films from "Blade Runner" to "Road Warrior." Wells' script also examines the role technology plays in saving a society devastated by years of war, and the inherent conflicts created when science becomes a society's "culture."

5. The Thing From Another World (1951) Christian Nyby

"There are no enemies in science, only phenomena to study," declares the enthusiastic research scientist who unwittingly allows a dangerous alien to roam freely in the remote Arctic research lab where the creature's craft has landed. The intelligent script's devotion to the scientific point of view, as well as the creature's ability to clone itself mark this early 50's classic as an early example of the film industries' attempt to both deal with and capitalize on the UFO craze. Along with "The Day The Earth Stood Still," this film established the cinematic tone for sci-fi fare for

years to come, cementing the dangerous and confusing relationship that aliens would have with man.

6. Frankenstein (1931) James Whale

This film single-handedly ushered in the classic era of horror films, while also unveiling the archetypal image of science gone terribly awry: the horribly disfigured, square-headed, and living-dead Frankenstein monster. Boldly displaying loads of fantastic mad scientist paraphernalia (including equipment created to reanimate dead human brain waves via electric current gleaned from the heavens), and featuring campy performances by the cast, Whale's film also featured a dark and serious tone, paying particular attention to gruesome detail regarding the entire process of dealing with death and the reanimation of the dead.

7. Metropolis (1926) Fritz Lang

Fritz Lang's German Expressionist vision of the dystopian future is not only one of the all time great science fiction films, many historians consider it the first science fiction film ever made. While Lang's film broke ground for its remarkable special effects, set design, and previously unparalleled epic scope for a "fantasy" film, this remarkable work also introduced 1920's audiences to the genre's very first robot, the evil Maria.

8. Contact (1997)

Penned by the late Carl Sagan, this film is considered one of the most accurate portrayals of man's quest to make contact with possible alien life. Director Robert Zemeckis deftly combines the fantastical and the realistic, offering up a detailed representation of SETI, and numerous other realistic glimpses into the actual science involved in spying on the heavens -- one of the rare examples of a sci-fi film that puts the "science" first, and the "fiction" second. Nominated for one Academy Award.

9. The Matrix (1999) The Wachowski Brothers

The film that altered the trajectory of the sci-fi film from the familiar late 80's model into a whole new animal. Featuring an array of remarkably novel and mind-boggling special effects, this film also offered up pop-psychology and a quasi-religious vision for the masses. Many bold ideas, such as the electrical current from human beings being used as a power source to fuel armies of maniacal robots, and a computer program that shrouds the consciousness of all living beings into believing they are actually living normal lives while their world is actually a post-nuclear nightmare, marked this film and not only made it one of the most important sci-fi films of the last ten years, but also a full-blown popular phenomenon. Nominated for four Academy Awards, and winner of Best Special Effects Oscar.

10. Star Wars (1977) George Lucas

With its remarkably realistic special effects, spectacular spaceship and space station designs, and numerous other jaw-dropping innovations, George Lucas reinvented the science fiction genre, while also creating one of the one of most important film of the 1970's. Hordes of imitators would follow, but none would quite capture the potent mixture of the old and new worlds of science fiction that Lucas wove together and unleashed on an unsuspecting populace in 1977. While it broke ground as a cinematic achievement, it also became a cultural phenomenon that continues to thrive, almost 30 years later. Nominated for ten Academy Awards, winning six (all in technical categories) and also winning a Special Achievement Award, "Star Wars" was also inducted into the National Film Registry.

11. The Attack of the 50 Foot Woman (1958) Dir. Nathan Hertz.

A jilted 1950's housewife sprouts into a crazed, man-stomping, 50-foot tall mutant after being exposed to alien radiation. A camp and ridiculous film that has become a cult classic over time due to its raw atrociousness, but also due to its proto-feminist undercurrents.

12. Them! (1954) Dir. Gordon Douglas

Often derided for its schlocky gigantic fiberglass ants, and considered the king of the "big-bug" movies, this mid-50's classic is actually quite terrifying and often imbued with a serious and sober tone. When families in the southwestern deserts start getting killed, the culprit turns out to be enormous ants, mutated to gigantic size by radiation fallout from nuclear bomb tests in the previous years. The ants eventually flee to Los Angeles causing a national emergency, and the army is called in to save the day. Nominated for a Best Special Effects Academy Award.

13. The Amazing Colossal Man (1957) Dir. Bert Gordon

A plutonium explosion causes a soldier to grow at the rate of 10 feet a day until he eventually becomes a grotesque monstrosity. This is yet another 50's-era, nuclear Nightmare, turned silly once the giant mutant doffs an enormous diaper to cover his enormous nether regions. Though unwittingly laughable at times, it is also horrific (the soldier's melting skin when exposed to the blast must have shocked '50's teens) and has endured because of its grim and cynical tone.

14. Destination Moon (1950) Dir. Irving Pichel

America's first true science-fiction film, this tale of man's first trip to the moon features beautiful production design and, for its time, jaw-dropping special effects. A very early vision of the post-WWII attempt to attain manned space travel, this classic also showcases a script by famed sci-fi scribe Robert Heinlein, and a bizarre appearance by the cartoon character Woody Woodpecker explaining the way rockets function. Winner of the Academy Award for Best Special Effects.

15. Forbidden Planet (1956) Dir. Fred M. Wilcox

Another classic from the 1950's, this is the first sci-fi film to adapt Shakespeare to the futuristic genre. The filmmakers use the plot from "The Tempest" to provide the fuel for an entertaining romp involving mad scientists, innocent maidens and "monsters from the Id," all set in 2020 on the fictional planet Altair. This film also features wonderfully inventive production design, carefully thought-out and functional machines, and the introduction of Robbie The Robot, the quintessential futuristic robot, mid-50's style.

16. On The Beach (1959) Dir. Stanley Kramer

The nuclear war is over, and the last place on earth where humans can survive is Australia. While the last inhabitants of planet Earth await the arrival of radiation clouds that will come and take their final breath, a glimmer of hope appears and a submarine commander and his hopeful crew set off to find salvation. This bleak vision of the post-apocalypse world is considered one of the best of the "doomsday dramas," and sports a fine cast to balance out its preaching. Nominated for an Editing Academy Award.

17. This Island Earth (1955) Dir. Joseph Newman

One of the more memorable sci-fi films of the 1950's, mostly due to its high-quality art design and special effects (including the mutant aliens with exposed craniums). This one features a group of scientists from various planets (including Earth) embarking on a mission to build a defense shield in space, a la the Star Wars defense system proposed by the USA in the early 1980's.

18. Bride of Frankenstein (1935) James Whale

This astounding second entry in the "Frankenstein" cycle actually rivals the original in both concept and production quality, and is considered by many critics to be the best "sequel" ever made. Featuring more reanimation of the dead via electricity (highlighted by the classic "shocked" hair of the "Bride"), and campy acting and histrionics, this classic also offers side adventures involving the fey and fascinating Dr. Praetorious, another mad scientist who "grows" living things in the lab, and gets Dr. Frankenstein and his monster into all types of macabre and mischievous acts.

19. The Fly (1958) Kurt Neumann

Another 50's classic dealing with science gone terribly awry. A brilliant scientist invents a machine that transmits objects through time and space by disassembling and reassembling them in transportation pods. Horrific consequences ensue when he uses himself as a guinea pig, not realizing that he shares the teleportation pod with a housefly. Famous for its closing images of the helpless fly-with-a-man's-head caught in a spider web sequence, this gem also featured the very expressive "fly's eye" point of view, a kaleidoscopic effect used to represent the multi-eyed insect-man's image of his screaming wife.

20. Spider-Man (2002) Sam Rami

Science student and uber-nerd Peter Parker gets bitten by a genetically modified spider during the course of a science demonstration and becomes the arachnid-themed super hero from the famous Marvel comic book. One of cinema's finest comic-book adaptations (second only to the remarkable "X-Men" series), Rami not only delivers on the special effects front, but also provides a palatable storyline that not only respects the original comic's sober tone, but also translates the original's focus on the relationship between "power and responsibility" to a fresh audience. Nominated for two Academy Awards.

21. The Hulk (2003) Ang Lee

In this tale of mutated DNA transforming a mild-mannered scientist into an enormous green monster, the film's producers actually created a replica of the existing and functional Gamma Sphere housed at the Lawrence Livermore Laboratory. The only catch is the real-life Gamma Sphere detects radiation, while the movie version emits it. But why quibble? There at least is an attempt to show some real-life science right next to a one ton growling mutant. Nominated for four Saturn Awards by the Academy of Science Fiction, Fantasy and Horror Films.

22. 2010 (1984) Peter Hyams

The sequel could never truly compare to the original, but this film is a remarkably strong sci-fi effort, and does manage to convey a lot of the tension and mystery associated with the original. This time out the crew goes off in search of the ill-fated USS Discovery to discover what the hell happened out there when the HAL 9000 lost its marbles. Astounding production design and once again featuring innovative spaceship designs, and other realistic earmarks of the futuristic potential of space travel. Nominated for a Best Art Direction Academy award.

23. Colossus: The Forbin Project (1970) Joseph Sargent

Following in the footsteps of the "computer-gone-mad" scenario explored in "2001," this film focuses on a huge computer designed to control American missile defense systems. Unfortunately for man, Colossus starts to communicate with its Russian counterpart and the machines decide they are no longer going to take orders from man, and in the process seek to attain control over the entire world. Fun to watch for all its dated 70's computer technology, this film also continues to explore the dangerous and mysterious aura surrounding artificial intelligence.

24. War Games (1983) John Badham

The movie that suddenly made computer nerds very cool, and also updated the "computer-gone-awry" sub-genre with an 80's twist: this time the computer wants to play games, rather than conquer the world. But the game -- "Thermo Nuclear War" -- turns out to be the real thing. While also introducing film audiences to gadgets like "home computers," this film also equated geekdom with the world's movers and shakers, assuring for eternity, unfortunately, the eventual inclusion of a tech geek in every action and sci-fi film made ever since. Nominated for two Academy Awards.

25. Solaris (1972) Andrei Tarkovsky, USSR

This somber and cerebral take on the effect space travel has on the psyche is one of the first science fiction films to merge the reality of spacecraft claustrophobia with a genuine sense of the unfathomable mystery of the great unknown. Considered one of the truly unique science fiction films of all time, and Russia's greatest contribution to the science fiction genre. Winner of the Grand Prize of the Jury at the Cannes Film Fest.

26. Alphaville (1965) Jean-Luc Goddard, France

New Wave auteur Jean-Luc Goddard took a whimsical and refreshing swipe at the sci-fi genre while also creating one of the all-time fascinating mixtures of film noir, fantasy and poetry. In a loveless future controlled by the giant Alpha 60 computer, inter-space detective Lemmy Caution tries to solve the mysterious disappearance of his predecessor. Winner of the Golden Bear at the Berlin Film Festival.

27. Man Facing Southeast (1986) Eliseo Subiela, Argentina

A mysterious man appears in a mental hospital, and it soon becomes increasingly confusing as to whether he is suffering from paranoid delusion, or an actual visitor from outer space. While set firmly in the reality of the everyday world and devoid of special effects, Subiela's tale provides the true aura of science fiction by making the audience believe that this ordinary man could possibly be an alien.

28. Stargate (1994) Roland Emmerich

A portal that folds time and space is the centerpiece in this well-made science fiction film that successfully merged probable physics with completely fanciful concepts. Lots of great special effects, and a satisfying connection to ancient Egyptian religious deities mark this film, that indulges greatly in improbability.

29. The Black Hole (1979) Greg Nelson

Inspired by the success of "Star Wars," Disney decided to enter into the special-effects laden arena of sci-fi, with decidedly mixed results. A thin, rehashed plot involving a mad scientist's search for the unknown cursed this one, but it will always be remembered for its dazzling effects, and introducing the term "black-hole" into the public's conscious. Not much else to recommend this film beyond the title, and the fact that the science behind the titular black holes is at times both accurately and then comically portrayed. Nominated for two Academy Awards.

30. Terminator II: Judgment Day (1991) James Cameron

Just as "2001" introduced audiences to a new type of realistic special effect, "T2" brought computer-generated special effects to the fore, with its shape-shifting evil terminator, and the mind-numbingly realistic vision of an atomic bomb destroying Los Angeles. Though not offering much on the 'content' side, Cameron's opus established new highs for sci-fi special effects, and

was also one of the 90's more entertaining and satisfying additions to the genre. Winner of four Academy Awards.

31. Red Planet (2000) Anthony Hoffman

Silly off-hand moments and a horrid script detract from this very well made and stirring tale of the first astronauts to land on Mars. Calling on technology straight out of the front pages (e.g., the air-bag landing system used for the Mars Rover) this film provides fine fodder for those curious about just what a Mars landing might actually feel like.

32. Fantastic Voyage (1966) Richard Fliescher

A group of scientists shrink themselves to the size of amoebas to enter into the body of a top scientist to perform an impossible operation. A truly fantastic idea that gets somewhat sidetracked by the filmmakers fascination with putting the buxom Raquel Welch into all types of alarming and revealing situations. Very solid special effects sequences (the scenes of the tiny inner-space ship traveling through human arteries and veering near the gigantic beating human heart are quite effective) and an attention to creepy details (microbes the size of small cats attacking the visitors) mark this entertaining but absurd film. Winner of the Academy Award for Art Direction and Special Visual Effects.

33. I Robot (2004) Alex Proyas

Incredible robot production design, and a fascinating vision of the not-too-distant future where robots assist humans in everyday life sets the stage for this thriller focusing on the moments where the dutiful robot-servants stage a rebellion against their human rules. Some detractors have bemoaned the ways this current version differs from Ray Bradbury's original tale but it still stays true to the concept that artificially intelligent beings will eventually hunger for "human" emotion.

34. Close Encounters of the Third Kind (1977) Steven Spielberg

The first film to usher in cuddly aliens (pre-"ET"), this mega-blockbuster also features remarkable spaceship designs, and Spielberg's unique grasp of merging melodrama with frighteningly chilling moments of sheer terror. Memorable scenes of aliens stealing children collide with other moments of enlightened scientists using musical notes as a language to communicate with the now-friendly visitors set the stage for the first film to try to maturely and intelligently deal with the possibility of alien-human contact. Winner of two Academy Awards.

35. THX1138 (1970) George Lucas

A cold, loveless future, where everyone's actions are monitored by computers, and emotions are numbed by daily sedation is the backdrop for Lucas' first feature film. Often derided for its dour vision, the film is actually filled with arch humor, and an incredibly frightening vision of a future where robotic police and government-sponsored drug protocols control our every action. Though ignored on its initial release, this film has finally been reevaluated and appreciated not only for its novel artistic vision (a blinding, white nothingness dominates the screen in most scenes), but also as an example of what Lucas could have done had he not made his mark with Ewoks and Deathstars.

36. The Core (2003) Jon Amiel

A team of scientists must bore into the middle of the planet to save mankind, unleashing all types of silliness. Voted the "worst physics movie ever" by the Insultingly Stupid Movie Physics website, this film is loaded with "blatant misrepresentations of physical laws...and pure fabrication of scientific facts" according to the website.

37. Armageddon (1998) Michael Bay

A team of astronauts and military yahoos must land on an asteroid that is heading for earth and blow it into half with nukes. In "science reality" there is a good chance the two halves would have still crashed into earth anyway, but this doesn't stop our heroes from saving the earth while crunching guitars blare in the background. A blatant example of putting the "fiction" before the "science." Nominated for five Academy Awards (winner of one) as well as nominated for numerous "Razzies."

38. Deep Impact (1998) Mimi Lederer

1998's other comet-to-Earth film, this one featuring two comets heading toward Earth at the same time, had a much more realistic and scientific approach towards explaining the reality of such a monumental event, including a somber and numbing conclusion. Overburdened with tearful goodbyes, this end of the world drama still managed to put audiences firmly in the pathway of total earth destruction.

39. The Day After Tomorrow (2004) Roland Emmerich

At times maddeningly focused on the "fiction" side of science fiction, this global warming cautionary tale also bravely makes a strong case for the dangers of greenhouse gas in the ambience of a mainstream feature film. The film's incredible special effects sequence featuring the flooding of New York followed by the City's subsequent freezing, has no rival, and though the science is muddled here, there's no escaping the cautionary power of watching the Earth's climate complete devolve in front of our eyes.

40. Journey To The Center of The Earth (1959) Henry Levin

Long before "The Core," we had this far-fetched but thoroughly entertaining journey into the earth's belly, complete with underground oceans, gigantic inner-Earth lizards, a mammoth mushroom grove and one of the most unbelievable endings in film history. While this adaptation of Jules Verne's classic novel firmly resides in the fantastical realm, it does offer some wonderfully inventive imaginings of what lies in the mysterious center of the earth. Nominated for an Academy Award for Art Direction.

41. The War of The Worlds (1953) Byron Haskin

The ultimate paranoid vision of what aliens are really after: the complete destruction of man and his lovely planet. This adaptation of H.G. Wells' classic tale of an alien invasion of Earth blooms forth in glorious Technicolor, and with its remarkably frightening special effects, completely captivated and spooked 1950's audiences. Winner of the Academy Award for Best Special Effects.

42. Independence Day (1996) Roland Emerich

An updating of "The War of The Worlds" for 90's sensibilities (complete with Area 51 conspiracy sub-plots), this rather silly and jingoistic action-fest, still managed to be both thoroughly entertaining while frustratingly stupid. Despite its flaws, the masterful special effects make it all worth watching: who can argue with a film that realistically features the destruction of almost every nation's capitol, followed by numerous scenes of huge fireballs and hurtling cars cascading through the streets of America, and concluding with a masterfully choreographed air battle between humans and aliens.

43. The Andromida Strain (1970) Robert Wise

Adapted from Michael Crichton's novel, this study of a pesky space microbe that threatens to destroy the planet's population freaked out, while entertaining audiences in the early 70's. Though the plot evolved around the mysterious dangers from space, it also focused on the

callous scientists who completely lose control of the bug due to their misguided eagerness to learn its secrets. Remind anyone of the GMO crisis looming in our present world? Nominated for two Academy Awards.

It Came From Television

44. Star Trek (1966-1969)

This seminal television show from the late 1960's is not only beloved for its colorful characters and thought-provoking scripts, but for actually inspiring working models for all types of modern functioning gadgets. With futuristic telecommunications devices that have actually been cited by designers as a model for the modern cell phone, and numerous other creative technical visions, Star Trek both inspired and set the groundwork for exploring all types of "final frontiers."

45. Stargate SG 1 (1997-2004)

Popular television series that further explored the infamous time-space gate unveiled in the feature film of the same title, this series featured above-average special effects and continued to provide the thrill ride and compelling content of its predecessor.

46. X-Files (1993-2002)

The truth was out there, and so was the audience for this groundbreaking 1990's television series that explored alien abduction, alien-human bio-engineering and all other things conspiratorial. Though the series continues today, the original run (with Mulder and Scully) is far superior.

47. The Outer Limits (1963-1965)

Though appearing somewhat dated by modern standards (and inferior to its more sophisticated counterpart, "The Twilight Zone"), this early '60's television show still accomplished something unique and powerful: it brought fantastical science-fiction, complete with monsters from space, into America's living rooms. Long before the boom of mid-60's small tube sci-fi ("Lost in Space", "The Invaders"), this series provided youngsters with all types of chilling tales.

Documentaries

48. What The Bleep Do We Know (2004) William Arntz, Betsy Chasse and Mark Vicente
Part documentary, part animated feature, part melodrama, this film explores quantum physics, spirituality, and the meaning of life, via interviews with some of the nation's top scientists and philosophers.

49. A Brief History of Time (1991) Errol Morris

An adaptation of Stephen Hawking's best selling book, this film features famous British physicist afflicted with ALS, using his now-famous synthesized speech computer to communicate his unique views on the natural world and the universe, on space, time and the meaning of black holes.

50. Atomic Café (1982) Jayne Loader and Kevin Rafferty

Combining newsreels, government archives, military training films to weave together an irreverent look at the atomic age, this documentary chronicles the creation of "the bomb" from its infant days in the 1940's up to the modern counterpart.