

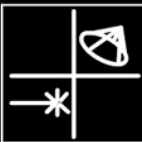
physics & film series

Celebrating the World Year of Physics, the Joint Institute for Nuclear Astrophysics (JINA) and the Department of Physics are sponsoring a **physics & film** series at the Browning Cinema in the ND PAC June – November 2005.

www.JINAweb.org



The Joint Institute for Nuclear Astrophysics
www.JINAweb.org



J I N A

physics & film series

The film series is intended to be a celebration of the World Year of Physics 2005 - the 100 year anniversary of Einstein's Miraculous year – and to promote science through popular culture and art. It was inspired by JINA's involvement in another outreach project, "Cinema and Science," which seeks to identify clips from films to excite kids about science. That European Union-wide educational project will eventually host on its web pages movie clips and relevant scientific explanations covering every area of science. You can help build that database of movies clips. To participate, go to our website, follow the instructions and complete the form.

The Joint Institute for Nuclear Astrophysics (JINA) is an NSF funded Physics Frontier Center at Notre Dame, Michigan State University, the University of Chicago and other institutions and national laboratories. Its research focus is to understand the origin of the elements (e.g., where does gold come from?), stellar evolution (i.e., the life course of the oldest and rarest stars in the universe) and stellar explosions (i.e., supernovae). While its primary focus is research, JINA has a lively and active outreach program bringing the science of the stars from the laboratories and the observatories to the community and the classroom. For example, we sponsor a program for elementary students combining art and science, we offer curriculum enhancement through mini-grants to teachers and classes at all levels, and we offer summer research experience opportunities in the labs at both ND and MSU.

june 21st

7 pm *Things to Come* (1936)

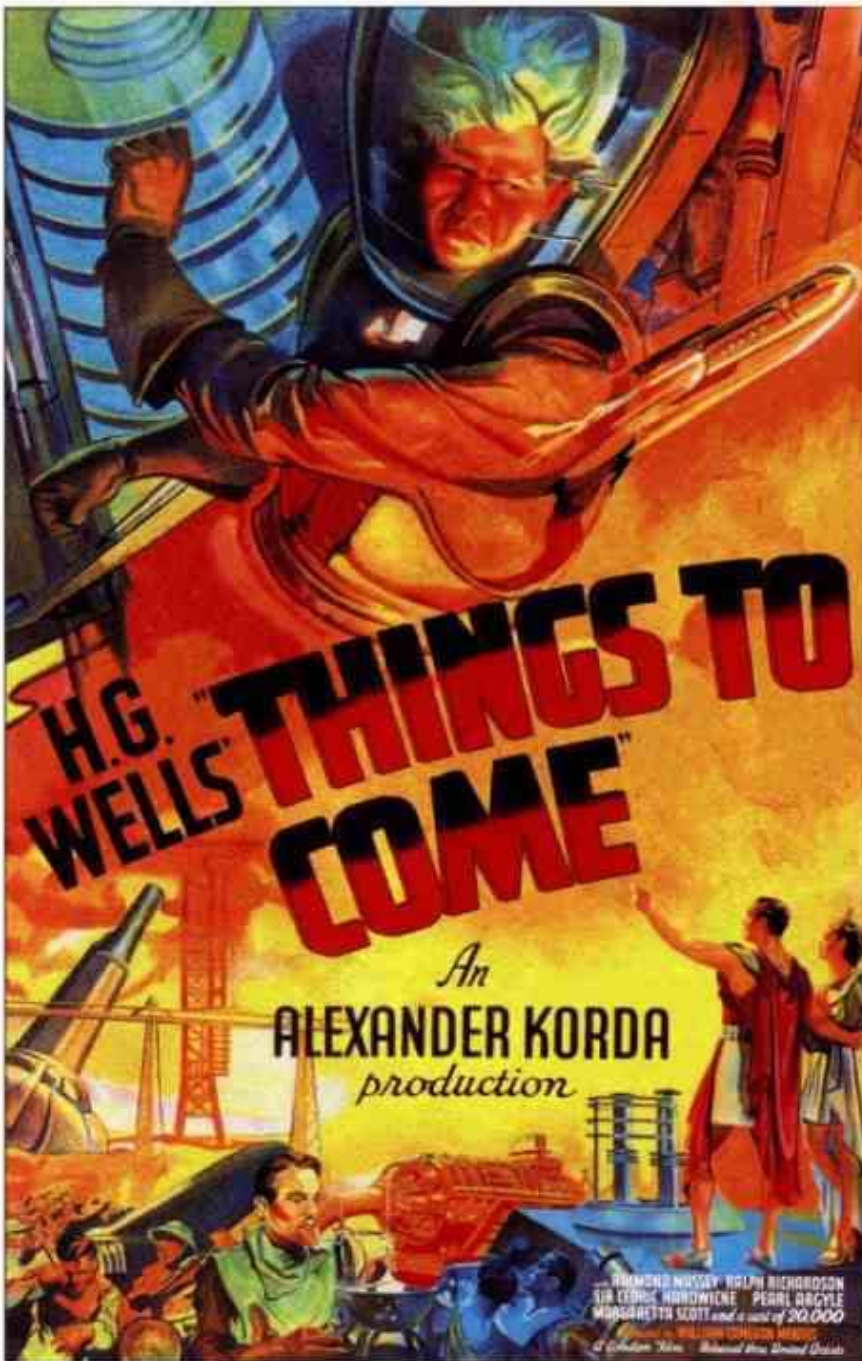
William Cameron Menzies, UK

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."

10 pm *Primer* (2004)

Shane Carruth

Former engineer Shane Carruth announces himself as a force to watch with *PRIMER*, his first film. Carruth wrote, directed, edited, produced, photographed, scored, and stars in the film, which won the Grand Jury Prize at the 2004 Sundance Film Festival. He plays Aaron, who, with his business partner and best friend, Abe (David Sullivan), experiments with a device that seems to have more power than they could ever have imagined. Playing with batteries, refrigeration, and other techniques and materials in Aaron's garage, they discover that their machine just might have the ability to move back in time. Originally dealing with Weebles figures and wristwatches, Aaron and Abe are soon considering making a box large enough to transport a human being--with remarkable results.

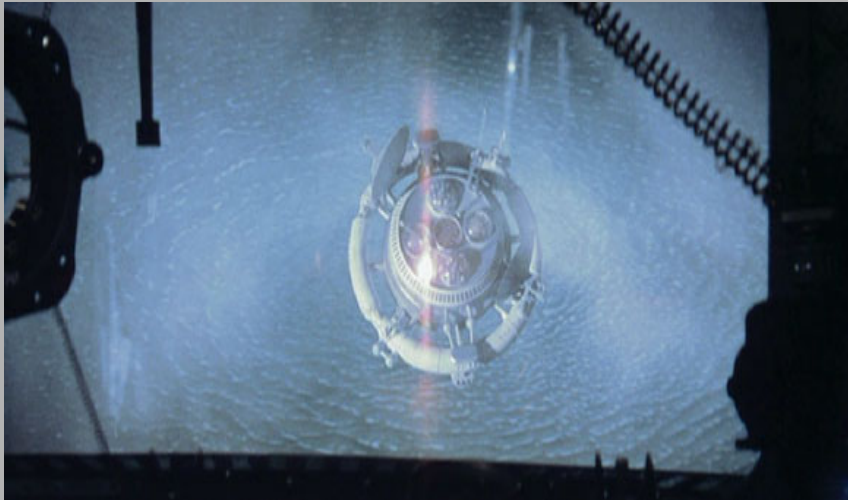


july 16th – all day marathon!

1 pm *Solaris* (1972)

Andrei Tarkovsky

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.



~~4:30 pm
Star Wars
(1977)~~



**4:30 pm *STAR TREK:
FIRST CONTACT* (1996)**



july 16th – all day marathon!

10 pm *Close Encounters of the Third Kind* (1977)

Steven Spielberg

The first film to usher in cuddly aliens (pre-"ET"), this blockbuster also features remarkable spaceship designs, and Spielberg's unique grasp of merging melodrama with frighteningly chilling moments of sheer terror.

7 pm *Fantastic Voyage* (1966)

Richard Fleischer

A group of scientists shrink themselves to the size of amoebas to enter into the body of the President to perform an operation.

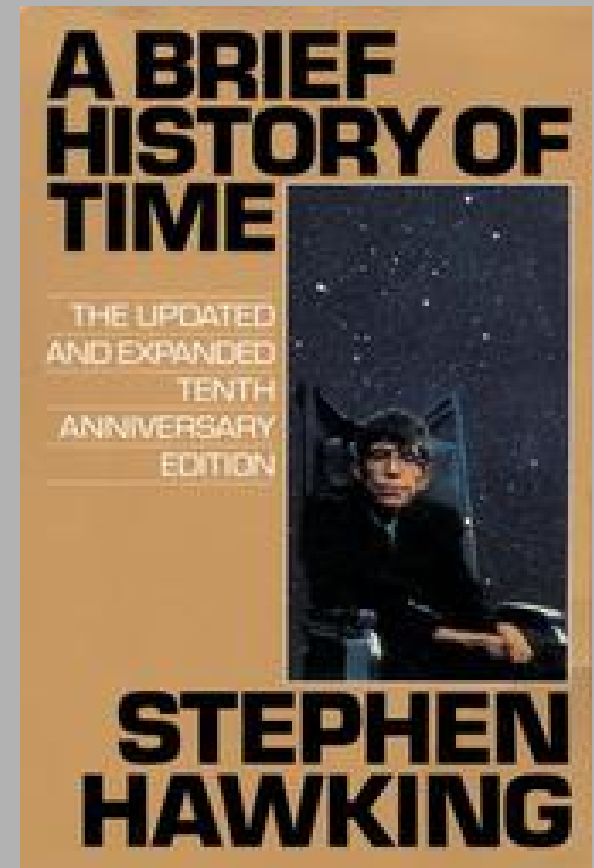
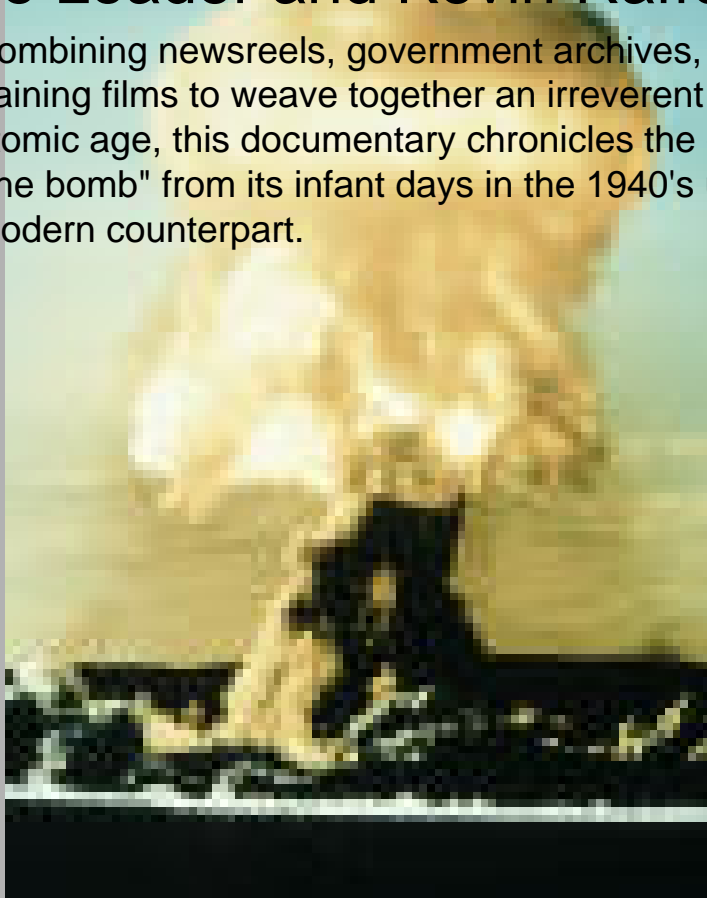


july 29

7 pm *Atomic Café* (1982)

Jane 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.



10 pm *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.

sept. 8



7 pm Metropolis (1926)

Fritz Lang

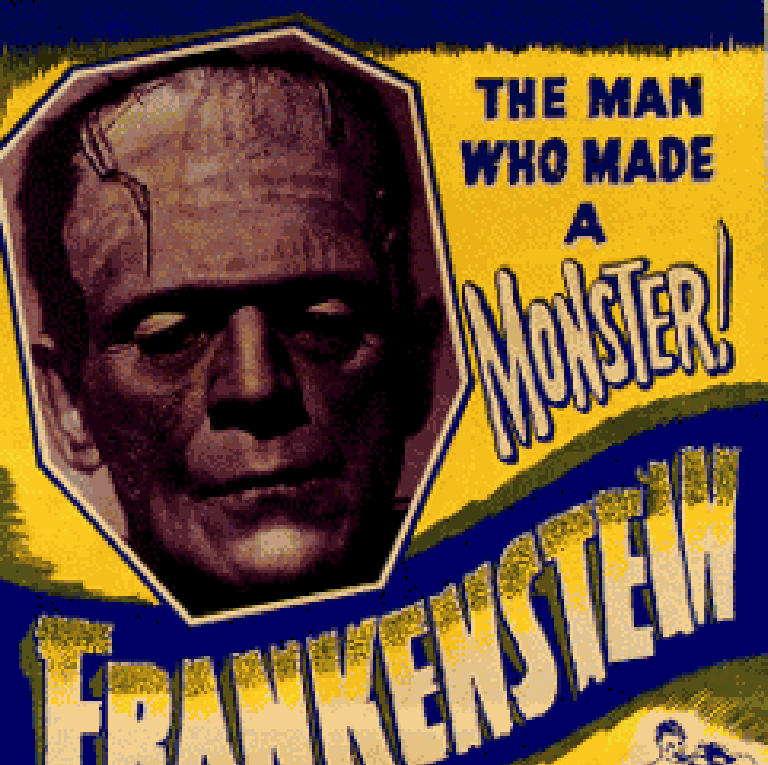
Fritz Lang's German Expressionist vision of the dystopian future is not only one of the all time great science fiction films, many historians consider it the first science fiction film ever made. While Lang's film broke ground for its remarkable special effects, set design, and previously unparalleled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



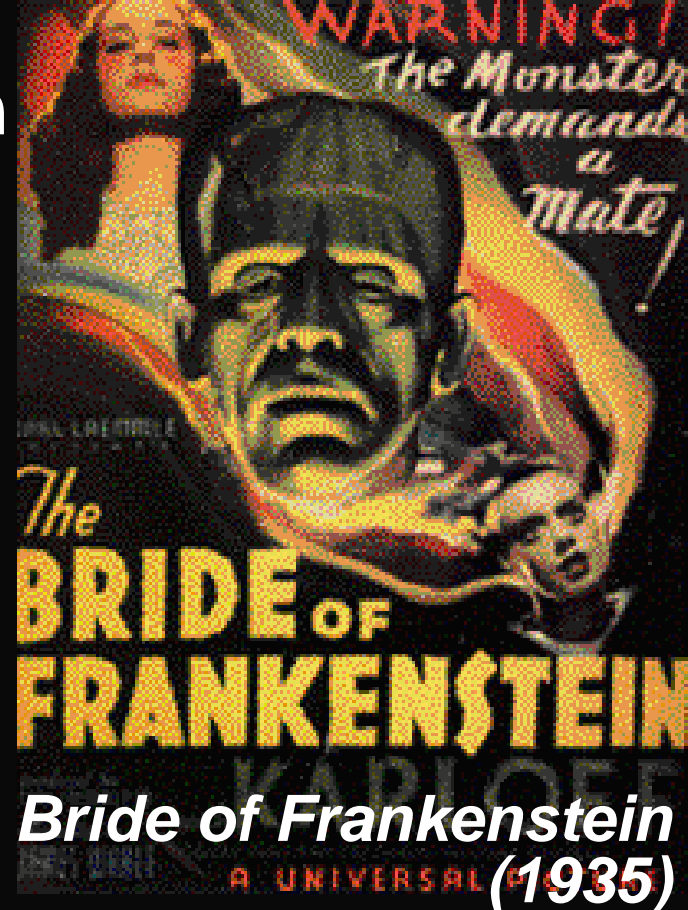
10 pm The Andromeda Strain (1970) Robert Wise

The picture runs 130 minutes!... The story covers 96 of the most critical hours in man's history!... The suspense will last through your lifetime!

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. Nominated for two Academy Awards.



oct. 27th



7 pm *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.

10 pm *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.

nov. 10th

7 pm *THX 1138 (1971)*

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.

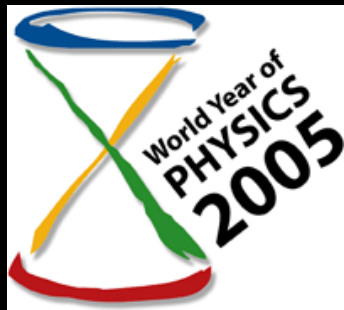
THE GEORGE LUCAS DIRECTOR'S CUT

10 pm *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.





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sponsored by the Joint Institute for Nuclear Astrophysics
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@ the Browning Cinema in the ND Performing Arts Center



summer screenings:

june 21	7 pm	Things to Come (1936)
	10 pm	Primer (2004)
july 16	1 pm	Solaris (1972)
	4:30 pm	Star Trek: First Contact (1996)
	7 pm	Fantastic Voyage (1966)
	10 pm	Close Encounters of the Third Kind (1977)
july 29	7 pm	Atomic Café (1982)
	10 pm	A Brief History of Time (1991)

NOTE: Dates, times and films are subject to change.

fall screenings:

sept. 8	7 pm	Metropolis (1926)
	10 pm	TBA
oct. 27	7 pm	Frankenstein (1931)
	10 pm	Bride of Frankenstein (1935)
nov. 10	7 pm	THX 1138 (1971)
	10 pm	2001: A Space Odyssey (1968)

The Joint Institute for Nuclear Astrophysics

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Cinema and Science:

What's wrong (or right) with this picture?

We want **YOU** to help us create a database of movie clips to excite and teach kids about science.

To participate:

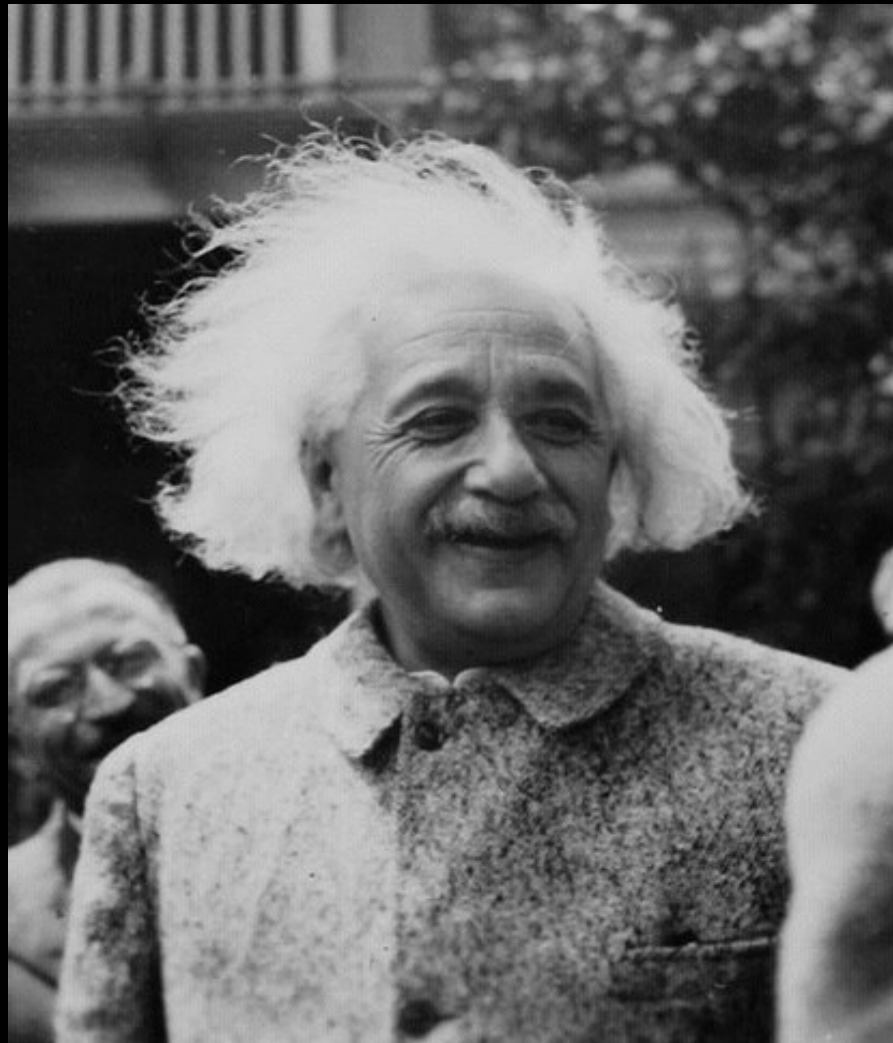
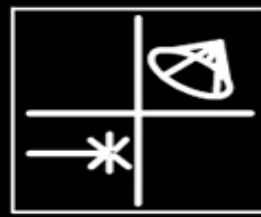
1. Rent a movie and watch it at home;
2. Identify a clip in the film having something to do with science;
3. Go to our website and write us a description of the film scene and the science involved (forms are provided at www.JINAweb.org).

All entries will be evaluated and if your clip is one of the first 50 clip entries selected, you will win cool JINA stuff (mouse pad, t-shirt, or coffee cup, etc.).

For example, remember the scene in *"Speed"* when the bus flies over the broken freeway? Could that really happen? If so, tell us how; and if not, tell us why not. Another example could be from *"Red Planet"* on the portrayal of how gravity works in space. You get the idea. Any film. Any science. (Clip submissions on "nuclear astrophysics" especially encouraged.)

Forms are available at:

www.JINAweb.org



got nuclear astrophysics?

