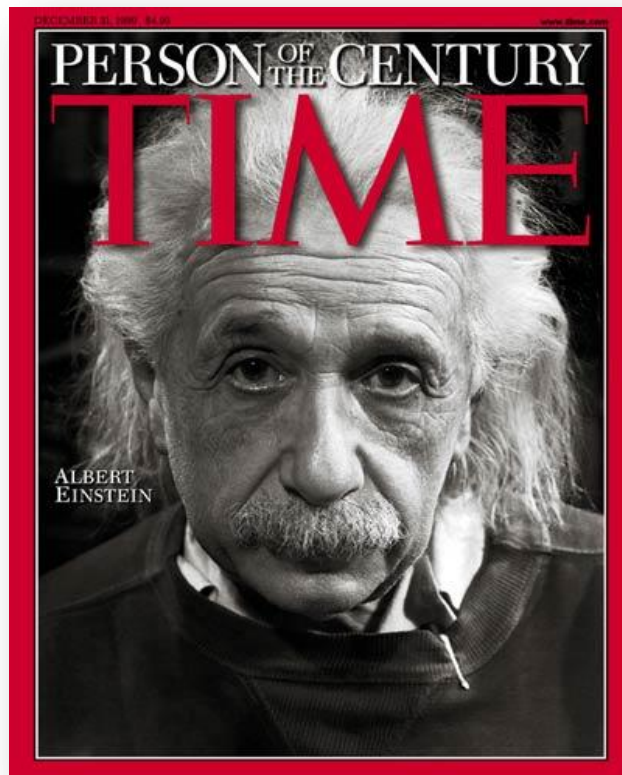
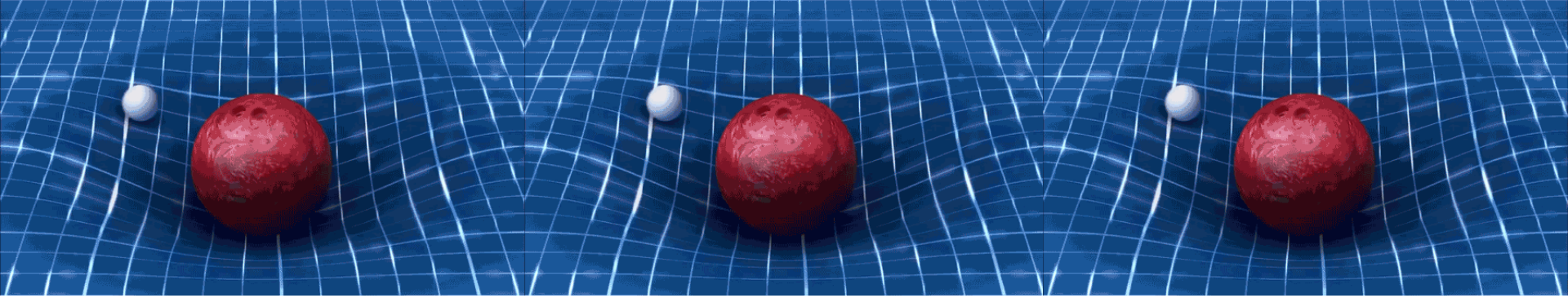


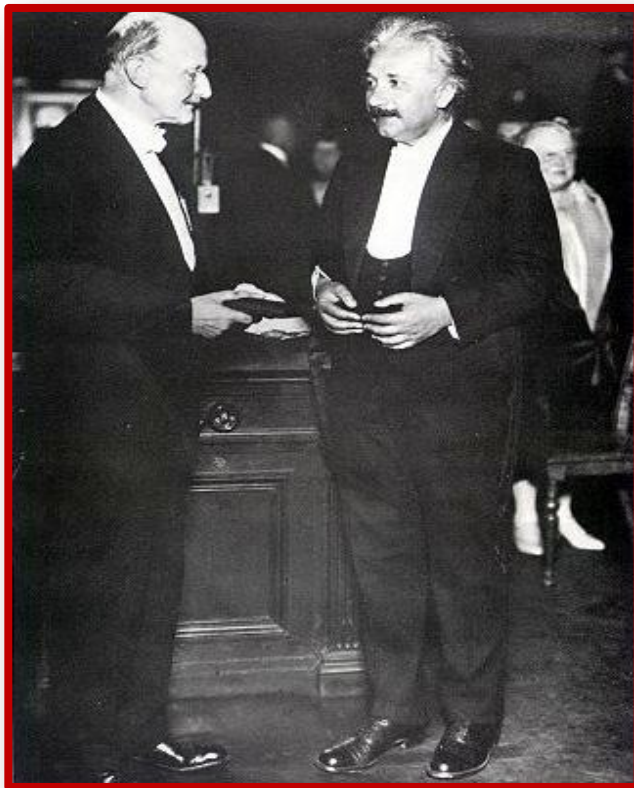
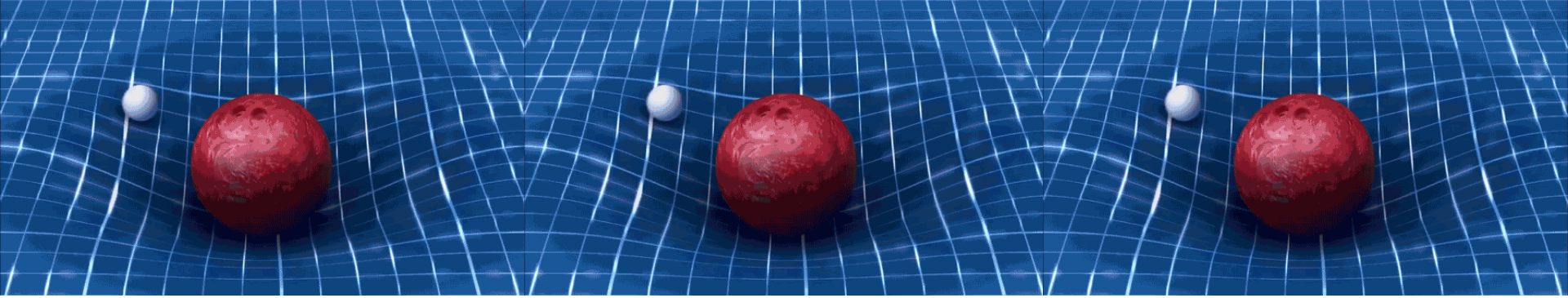
**14 March 1879
Ulm (Germany)**

**18 April 1955
Princeton (New Jersey)**

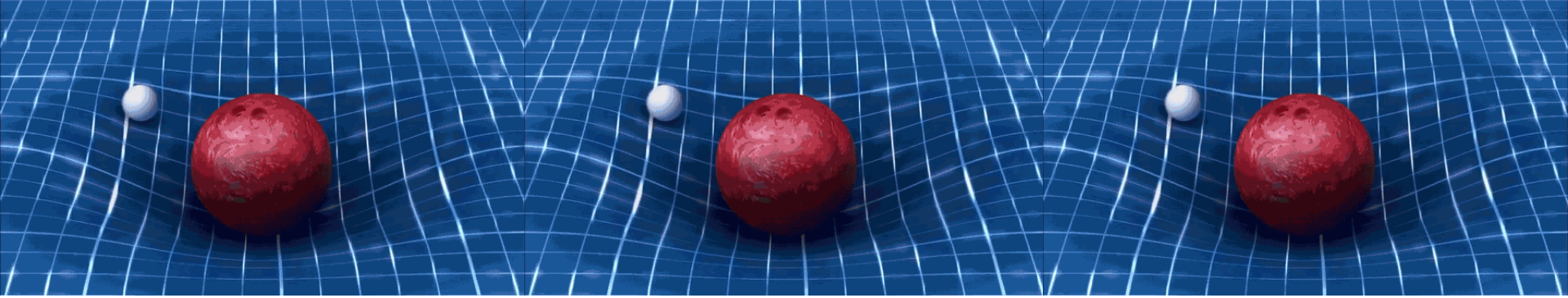


«He was the pre-eminent scientist in a century dominated by science. The touchstones of the era - the Bomb, the Big Bang, quantum physics and electronics - all bear his imprint.»

Dec. 31, 1999

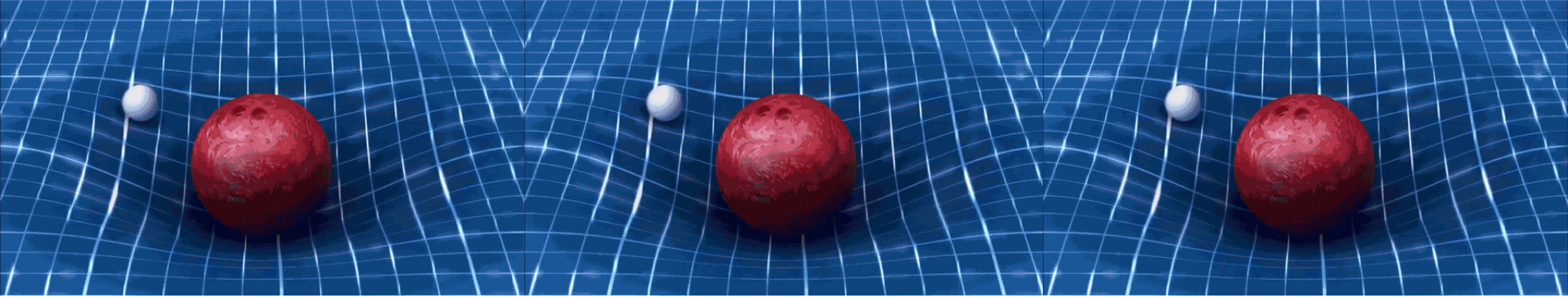


In 1921 he got the Nobel Prize in Physics «for his services to Theoretical Physics, and especially for his discovery of the law of the photoelectric effect».



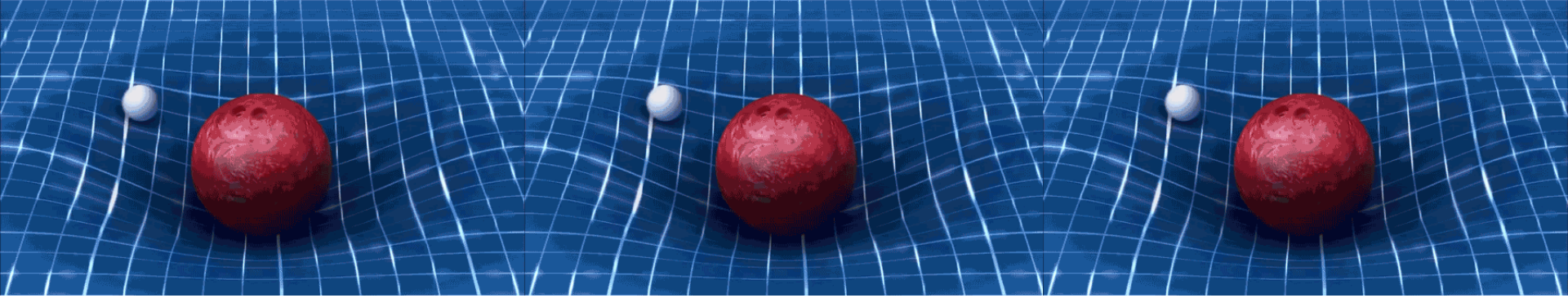
When Hitler took the power in 1933, Albert Einstein, German of Jewish origin, was the director of the Kaiser-Wilhelm-Institut Physics Laboratory.

He was abroad when his home and his lab were destroyed by the Nazis. So, he decided not to return to Germany and to settle in New Jersey, where he obtained a professorship at Princeton University.



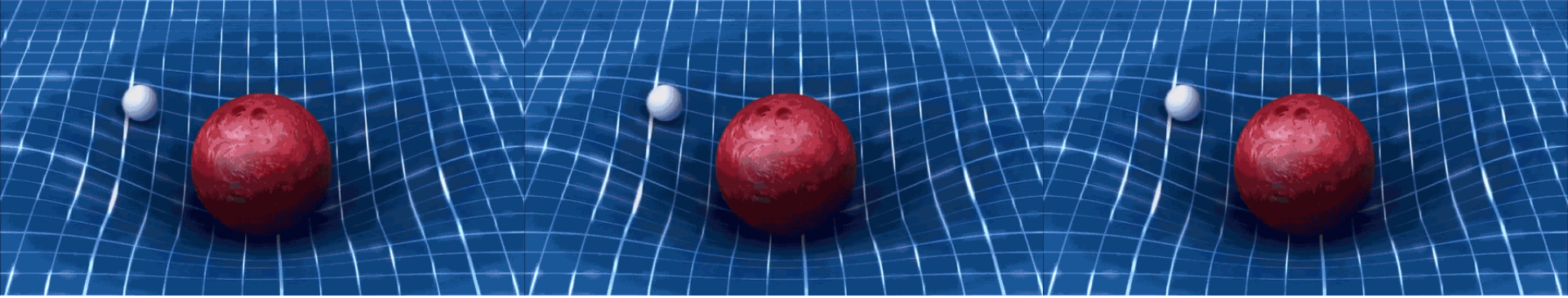
In 1939-1940 Einstein wrote more than one letter to the US President F.D. Roosevelt to inform him about the German researches which could have led to an atomic bomb, so maybe, in Einstein's opinion, the USA and its allied countries would have done the right thing if they had started working in that direction.

Really, as it became known later, Roosevelt read Einstein's letters after he decided to build the atomic bomb in Los Alamos, New Mexico.



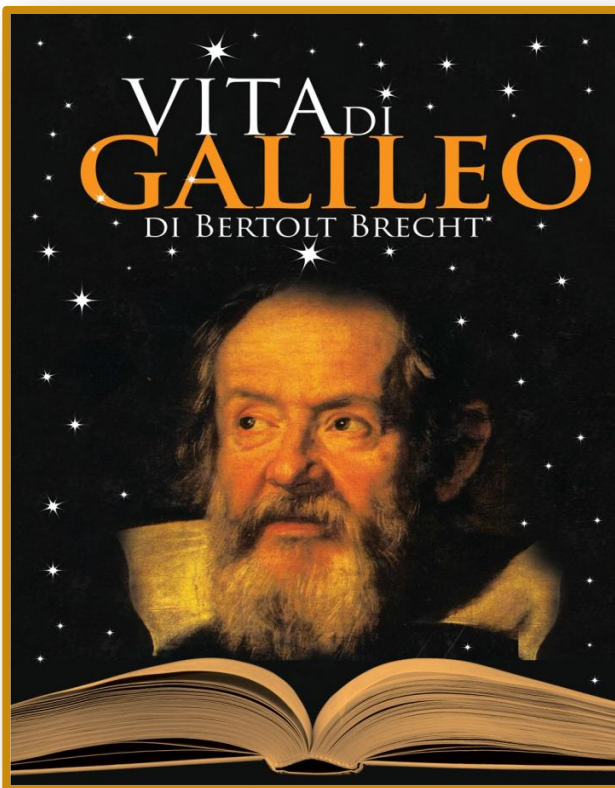
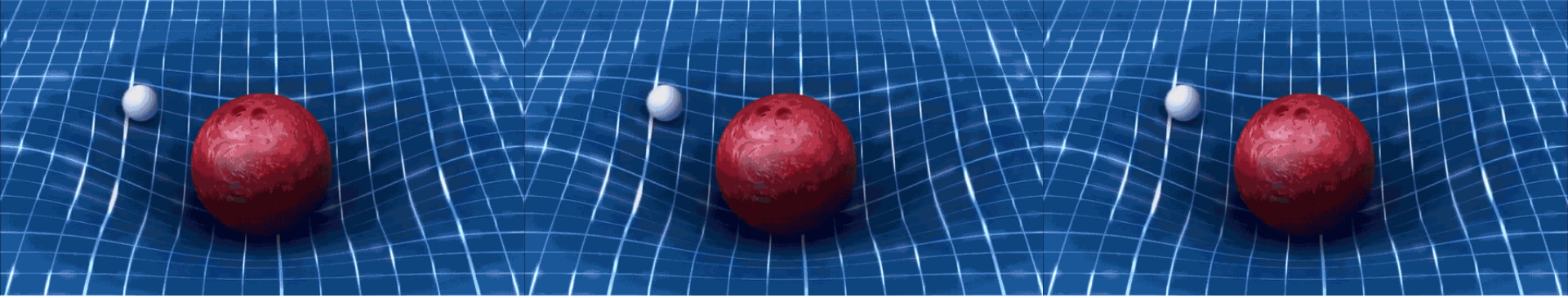
Nevertheless Einstein felt for all his life* the remorse of having been, at least morally, co-responsible for this tragic and terrible event that put a dark light on modern science.

***He died in 1955, ten years after the outbreak of the two bombs, *Little Boy* in Hiroshima (06 August 1945) and *Fat Man* in Nagasaki (09 August 1945).**

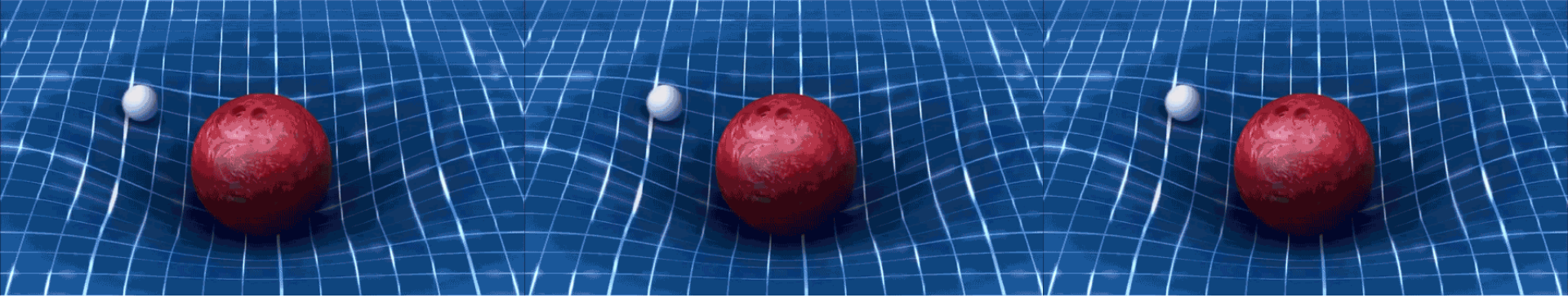


Anyway, when Roosevelt started the Manhattan Project, Einstein is not called to participate.

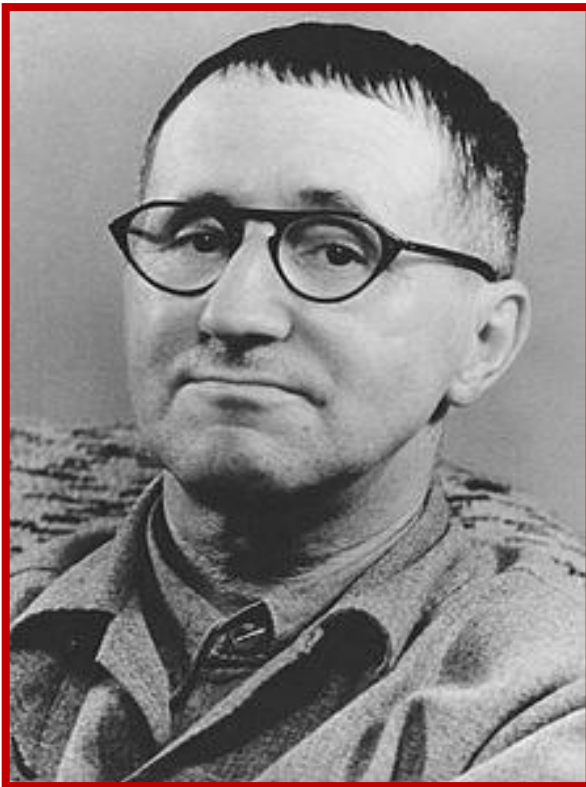
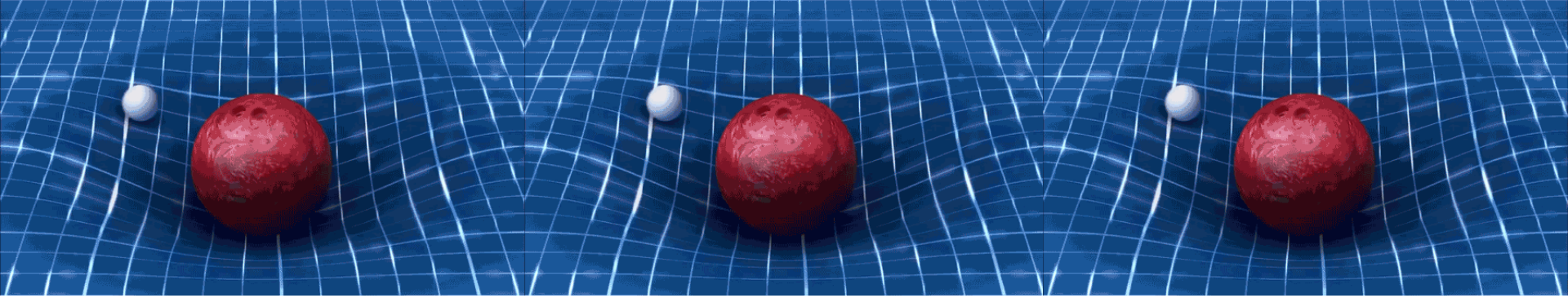
The FBI director J.E. Hoover, indeed, recommended their expulsion from the USA as an unwelcomed person for his pacifist and libertarian positions.



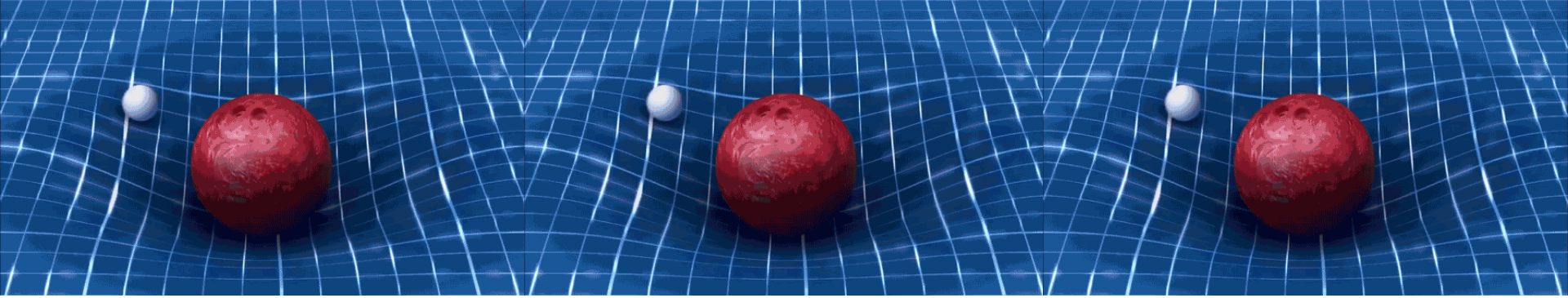
In *Leben des Galilei* (*Life of Galileo*), a play written in 1938-1939, the German author Bertolt Brecht introduces the scientists as traitors who collaborated with the power supplying armaments.



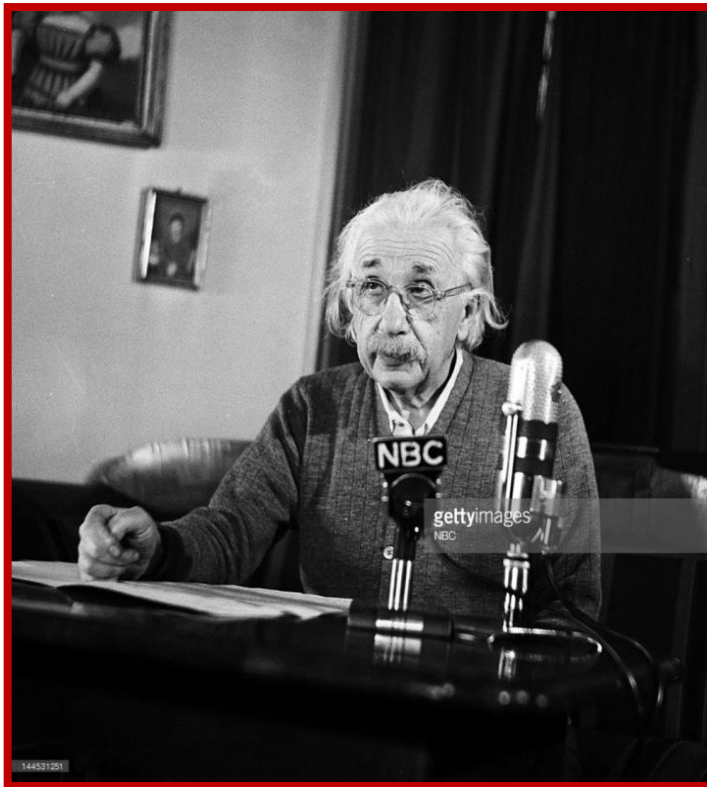
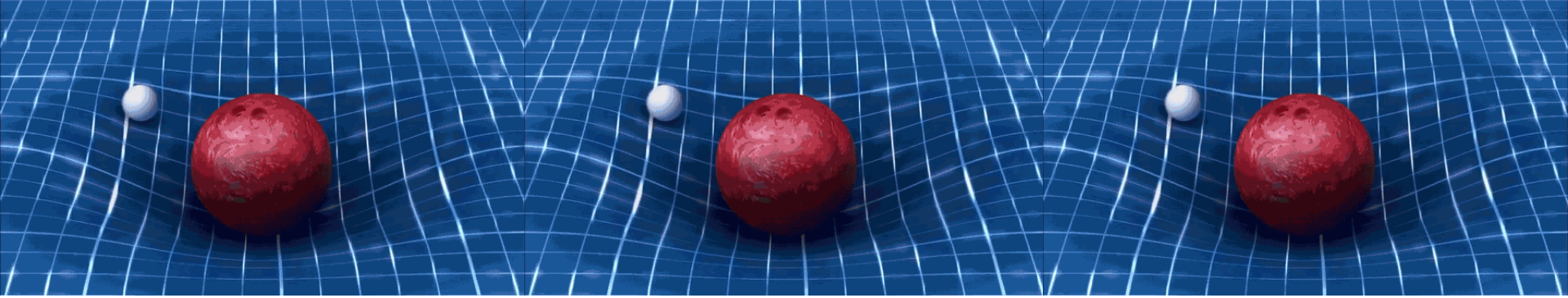
Galileo: I moti dei corpi celesti ci sono divenuti più chiari; ma i moti dei potenti restano pur sempre imperscrutabili ai popoli. [...] Se gli uomini di scienza non reagiscono all'intimidazione dei potenti egoisti e si limitano ad accumulare sapere per sapere, la scienza può rimanere fiaccata per sempre, ed ogni nuova macchina non sarà fonte che di nuovi triboli per l'uomo. E quando, coll'andar del tempo, avrete scoperto tutto lo scopribile, il vostro progresso non sarà che un progressivo allontanamento dall'umanità. Tra voi e l'umanità può scavarsi un abisso così grande, che ad ogni vostro eureka rischierebbe di rispondere un grido di dolore universale... [...] Per alcuni anni ebbi la forza di una pubblica autorità; e misi la mia sapienza a disposizione dei potenti perché la usassero, o non la usassero, o ne abusassero, a seconda dei loro fini. Ho tradito la mia professione; e quando un uomo ha fatto ciò che ho fatto io, la sua presenza non può essere tollerata nei ranghi della scienza.



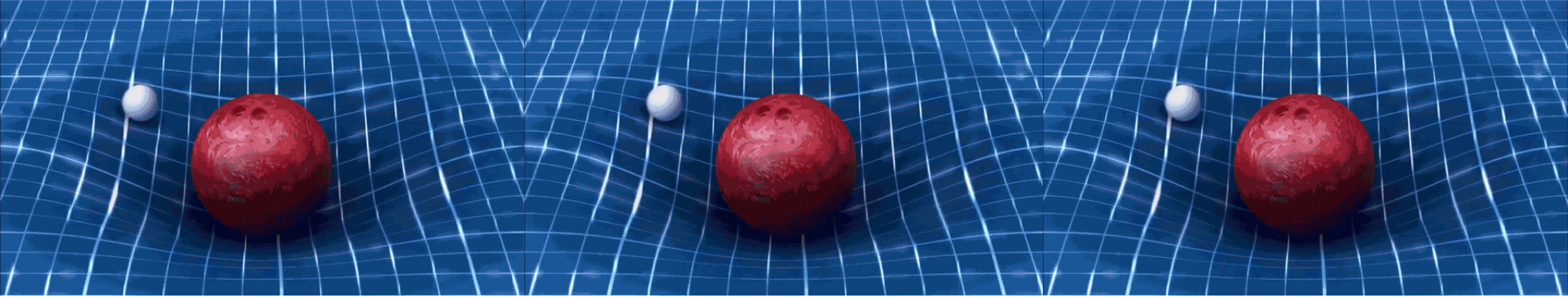
Brecht, with his way of making Literature, imposed his «relativity»: for him, every work is, in itself, “relatively definitive”.



US citizen since 1940, Einstein, after the bombing of H. and N., engaged more and more actively in the international peace movement. It tirelessly confirmed the necessity of the commitment of intellectuals and scientists in defense of democracy and freedom, as well as the use of scientific knowledge for peaceful purposes.

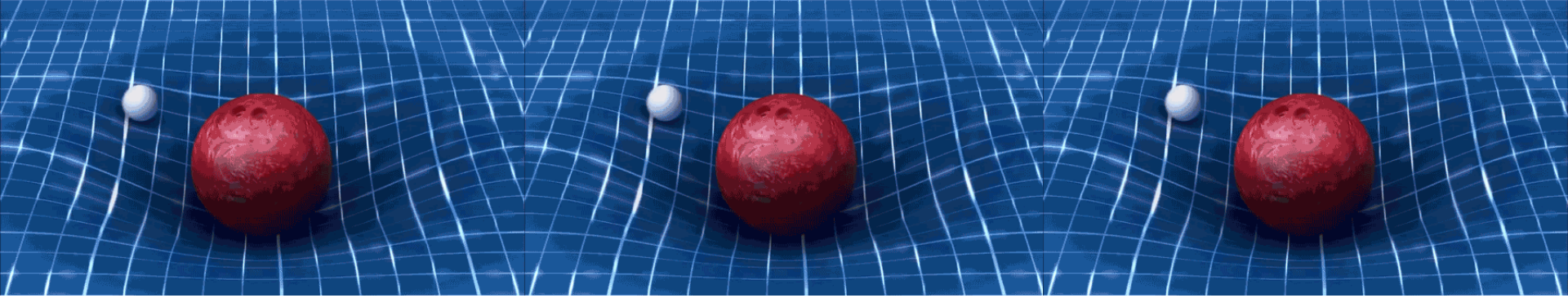


Address on Peace in the Atomic Era
**Speech during the afternoon
program *Mrs. Roosevelt Meets the
Public*, on NBC television network,
Feb. 12, 1950.**

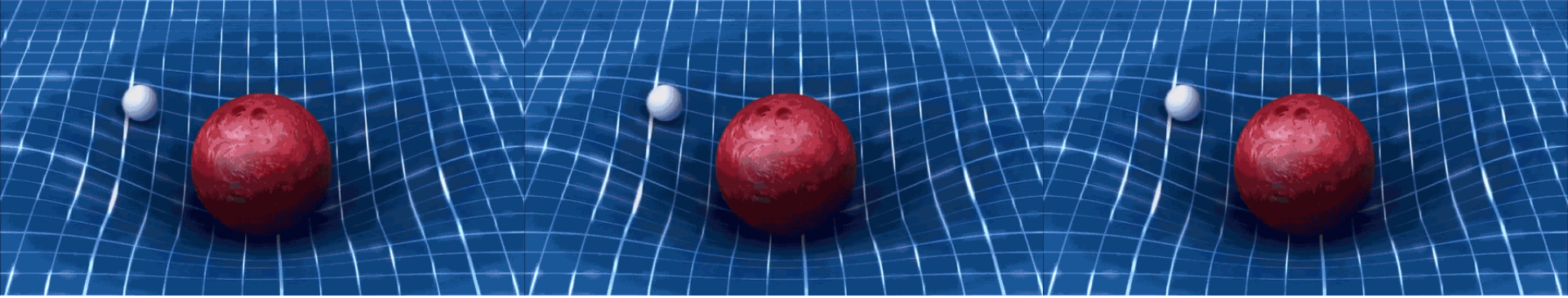


**Einstein's last formal act was a letter to Bertrand Russell in which he signed what became known as the [Russell and Einstein Manifesto](#) (09 July 1955). The two scientists, with other nine colleagues, took a stand against the atomic bomb, denouncing the dangers of nuclear war and promoting nuclear disarmaments. The other nine scientists were:
Max Born - Percy W. Bridgman - Leopold Infeld - Frédéric Joliot-Curie - Herman J. Muller - Linus Pauling - Cecil F. Powell - Joseph Rotblat - Hideki Yukawa.**

They were all Nobel Laureates, except Infeld.



The Manifesto gave birth to what is called the PUGWASH CONFERENCES ON SCIENCE AND WORLD AFFAIRS, founded in 1957 in the Canadian city of Pugwash, which was awarded in 1995, forty years after the death of Einstein, with the [Nobel Peace Prize](#).



1905: MIRACLE YEAR

Einstein published FOUR papers which contributed strongly to the foundation of modern physics and changed views on space, time, and matter. They were:

1. about photoelectric effect - *Über einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt*, *Annalen der Physik*, 17, 132-148 - *On a Heuristic Viewpoint Concerning the Production and Transformation of Light*;
2. about Brownian motion - *Über die von der molekularkinetischen Theorie der Wärme geforderte Bewegung von in ruhenden Flüssigkeiten suspendierten Teilchen*, *Annalen der Physik* 17, 549–560 - *On the Motion of Small Particles Suspended in a Stationary Liquid, as Required by the Molecular Kinetic Theory of Heat*;
3. about special relativity - *Zur Elektrodynamik bewegter Körper*, *Annalen der Physik* 17, 891–921 - *On the Electrodynamics of Moving Bodies*;
4. about mass-energy equivalence - *Ist die Trägheit eines Körpers von seinem Energieinhalt abhängig?*, *Annalen der Physik* 18, 639–641 - *Does the Inertia of a Body Depend Upon Its Energy Content?*

