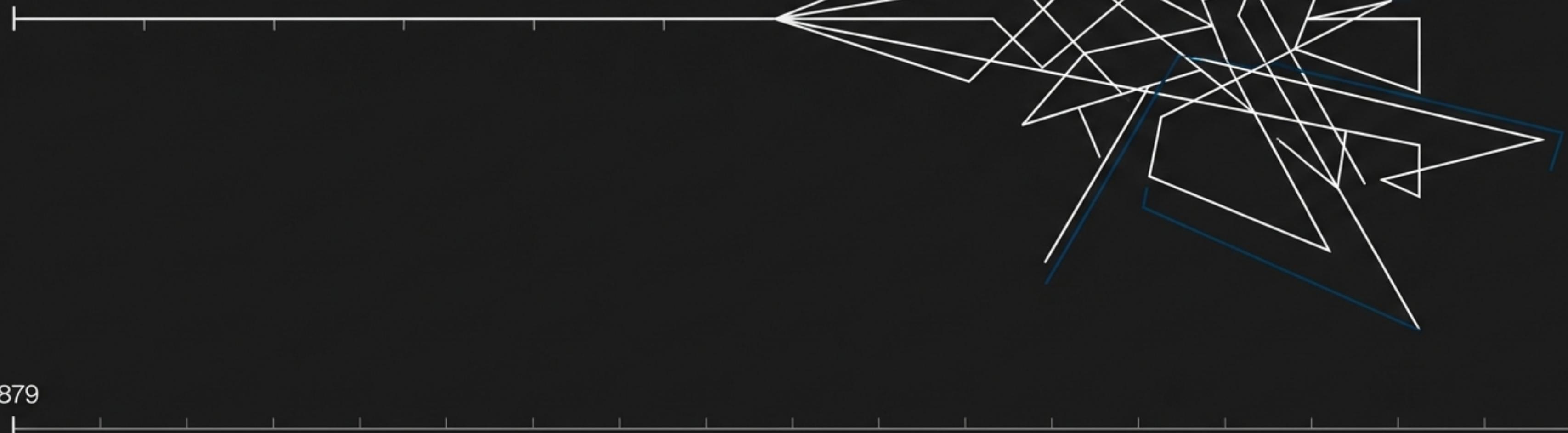


The Evolution of a Mind: Albert Einstein

Physics, Politics, and the Strange Afterlife
of a Brain (1879 – 2025)



Einstein is synonymous with genius, but his timeline is a map of conflict.



1. The Spark (1879–1905)

The rebellion against authority that led to the rewriting of physics.

2. The Expansion (1906–1932)

The rise to global fame and the formulation of General Relativity.

3. The Conscience & Afterlife (1933–Present)

Political activism and the bizarre scientific journey of his physical brain.

The Stateless Youth

- 1879: Born in Ulm, Kingdom of Württemberg.
- 1896: Renounces German citizenship at age 17 to avoid military service.
- Status: Stateless for five years before becoming Swiss.



"The laws by which the states of physical systems alter are independent of the alternative, to which of two systems of coordinates... these alterations of state are referred."

The Polytechnic Cohort (Section VIA)



Albert Einstein
Entrance Average: 4.25 (Scale 1-6).
Graduation: 1900.

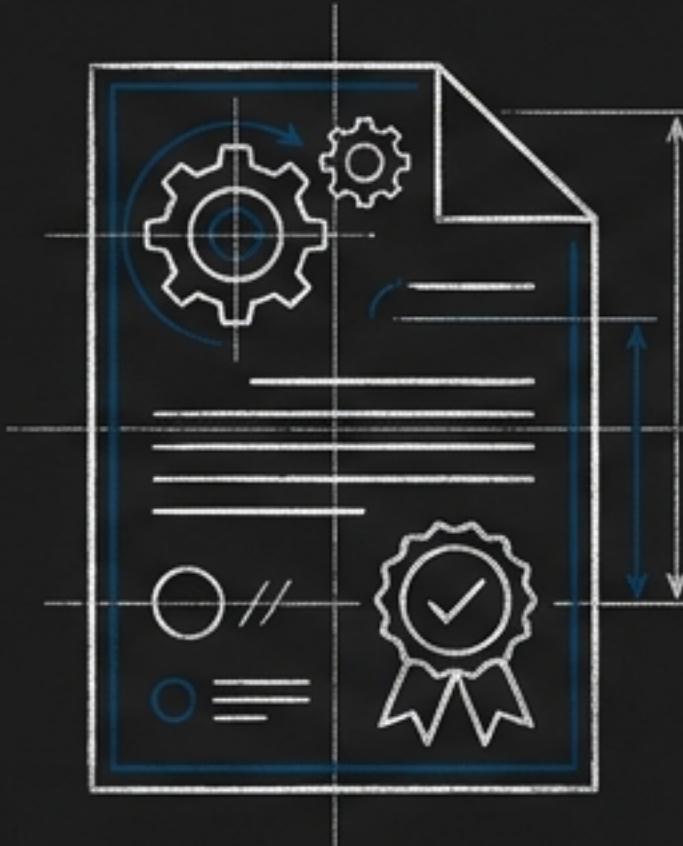
1879

1900

2025

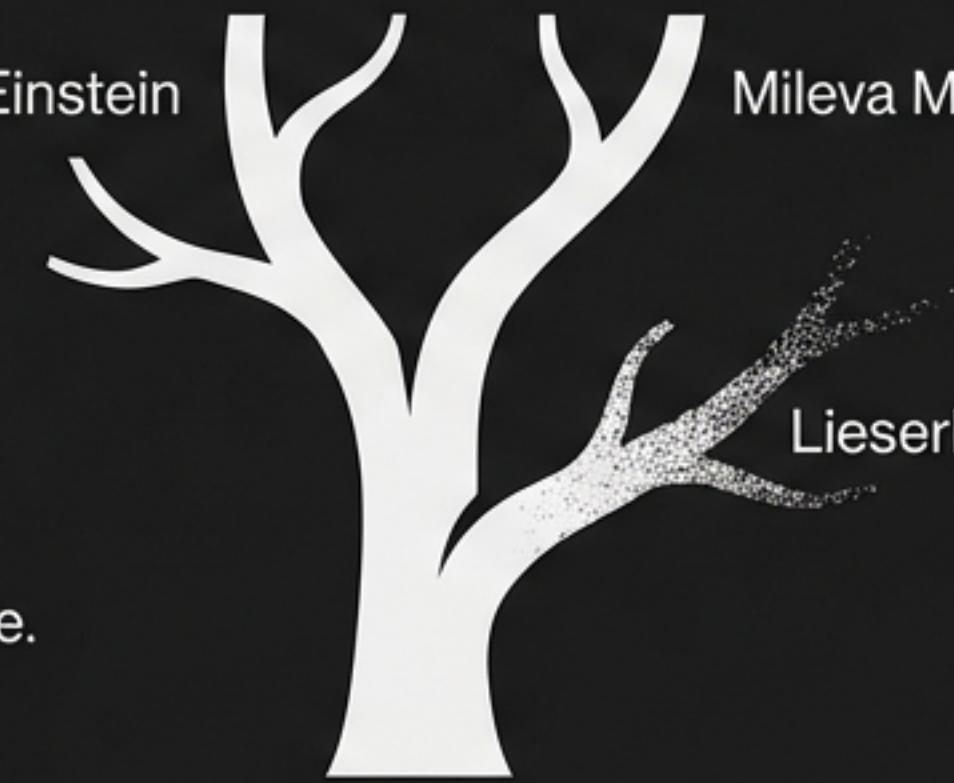
Mileva Marić
The only woman in the cohort.
Coursework: Differential/Integral Calculus,
Theoretical Physics, Astronomy.
Failed Diploma Exam: 1900 (Grade 4.00).

The Patent Office and The Lost Daughter



Albert Einstein

Mileva Marić



1902: Einstein employed as Technical Expert, Class III, Bern Patent Office.

Jan 1902: Birth of 'Lieserl' in Novi Sad. Illegitimate. Einstein never meets her. She disappears from historical record.

1903: Marriage to Mileva Marić against family wishes.

Insight: The isolation of the patent office provided the freedom to think, away from academic rigidity.

Context: The Collaboration Debate

Did Mileva Marić co-author the 1905 papers?

Evidence For

- **Letters:** Einstein refers to “our work” and “our theory” (1901).
- **Joffe’s Memoir:** Refers to the author of the 1905 papers as “Einstein-Marity”.

Evidence Against

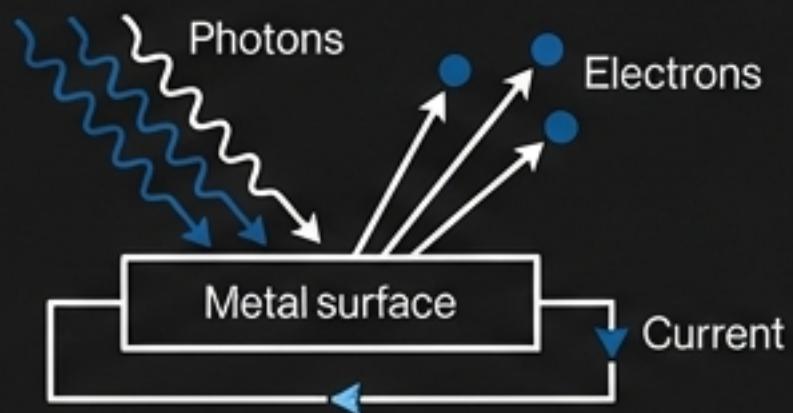
- **Archives:** No published papers exist in her name.
- **Analysis (Stachel):** “Our” referred to shared thesis topics. Marić’s letters contain personal matters, not scientific rebuttal.

1905: Annus Mirabilis (The Miracle Year)

At age 26, working six days a week at the patent office, Einstein publishes four papers in *Annalen der Physik* that revolutionize science.

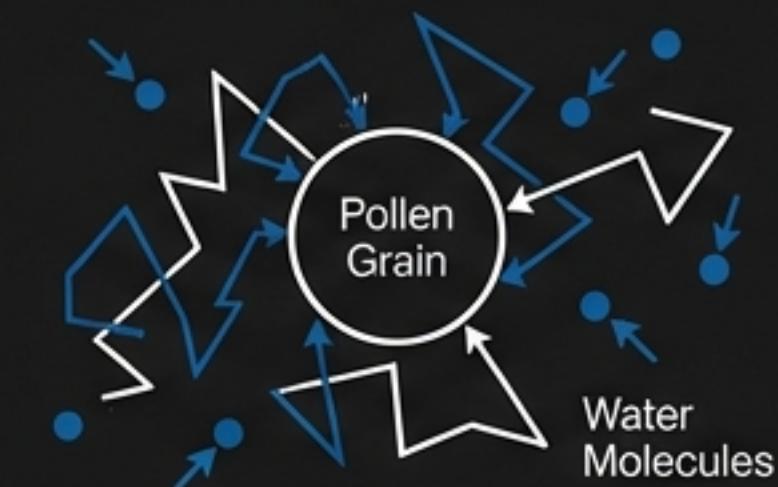
1. The Photoelectric Effect

Proving light acts as particles (quanta).



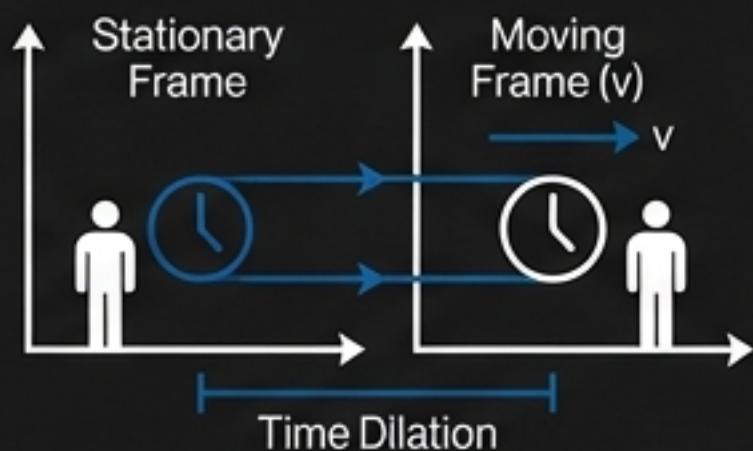
2. Brownian Motion

Confirming the existence of atoms.



3. Special Relativity

Reconciling electrodynamics with mechanics.



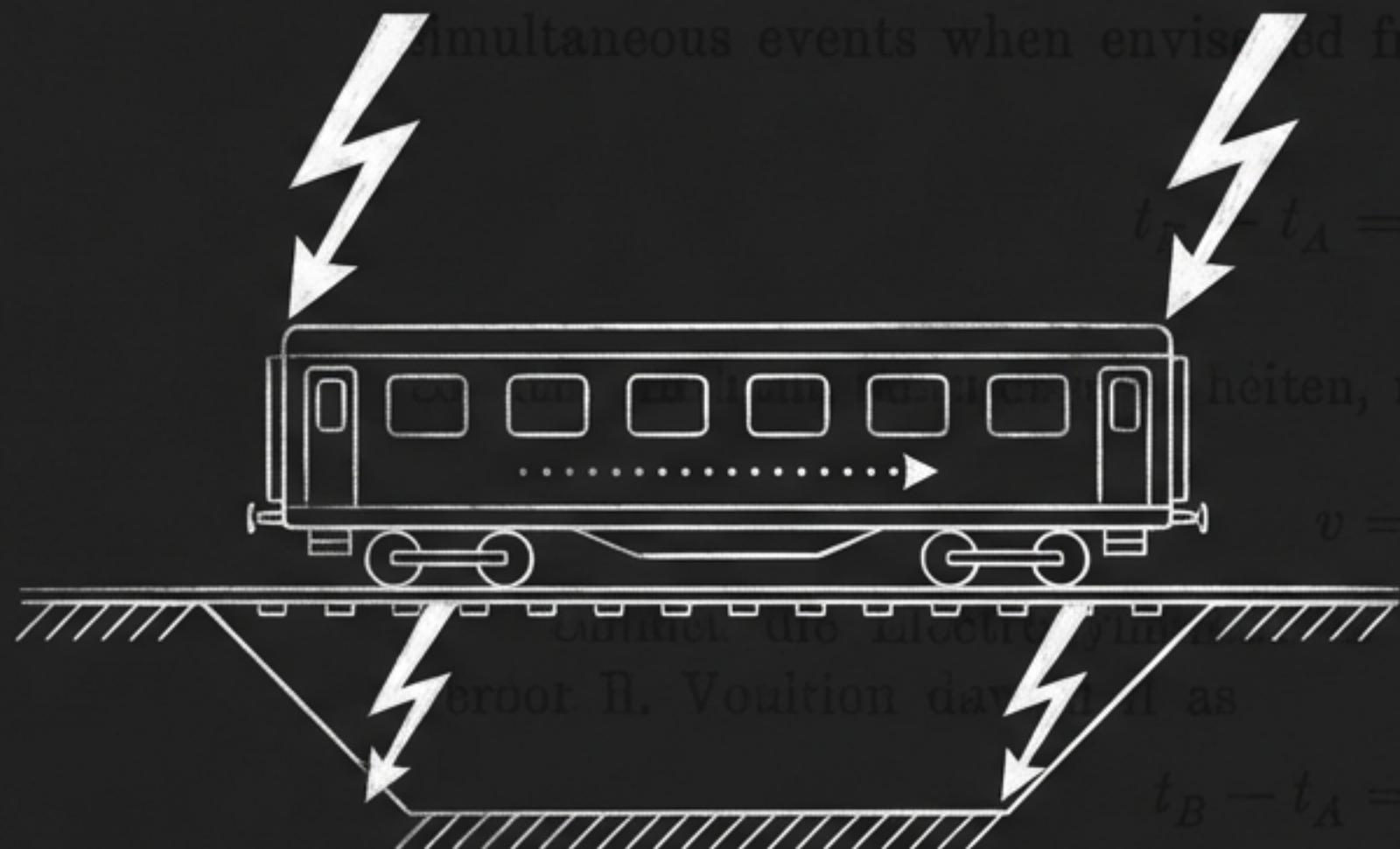
4. Mass-Energy Equivalence

The relationship between matter and energy.

$$E = mc^2$$

A diagram illustrating the mass-energy equivalence equation $E = mc^2$. On the left, the equation is written. To the right, a central white circle represents mass (m). Blue arrows point away from the circle, representing energy (E). A label "Speed of Light²" is shown near the arrows.

Zoom In: The Death of Simultaneity



“Two events which, viewed from a system of co-ordinates, are simultaneous, can no longer be looked upon as simultaneous events when envisaged from a system which is in motion.”

$$t_B - t_A = r_{AB}/(c - v)$$

Source: 'On the Electrodynamics of Moving Bodies' (June 30, 1905).

Time is not a universal constant; the speed of light (c) is.



Zoom In: Radiation Conveys Inertia

If a body emits energy L in the form of radiation, its mass decreases by L/c^2 .



The mass of a body is a measure of its energy-content.



$$m = L/c^2$$

(which later became $E = mc^2$)

Source: "Does the Inertia of a Body Depend Upon Its Energy-Content?" (Sept 27, 1905).

1907–1915: The Happiest Thought



Special Relativity applied only to uniform motion. Einstein needed to account for acceleration and gravity. This ten-year struggle culminated in the Field Equations of Gravitation.

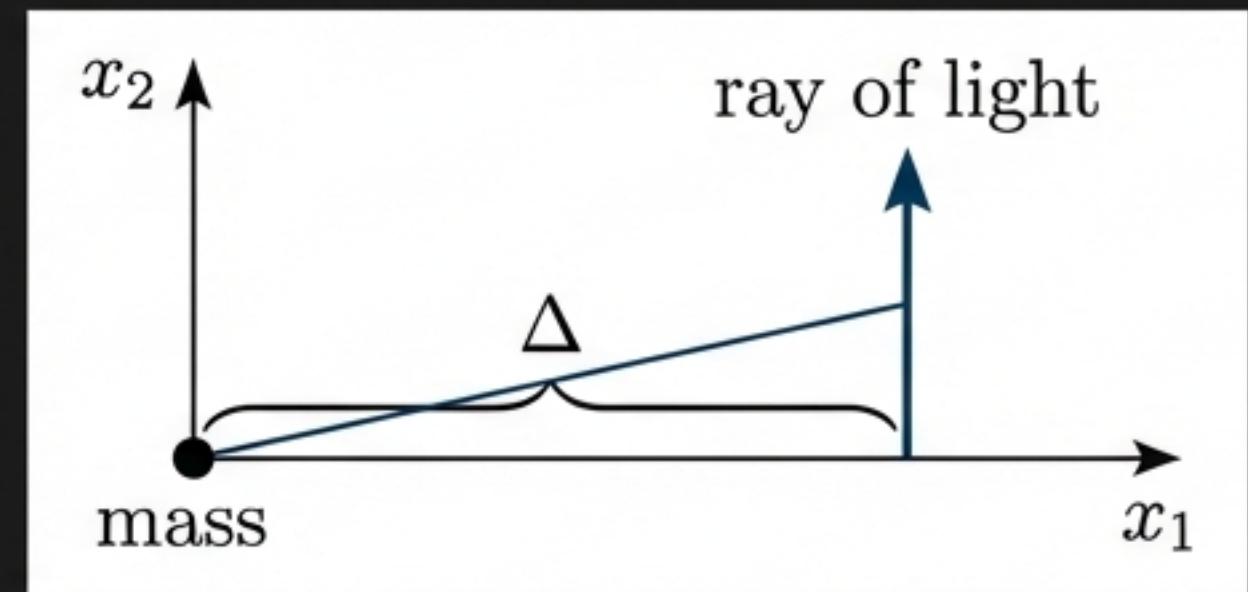
Key Concept: Gravity is not a force, but a curvature of the space-time continuum.

“The general laws of nature are to be expressed by equations which hold good for all systems of co-ordinates.” (General Co-Variance).

1919: The Eclipse and The Divorce

The Science

Event: Eddington confirms the bending of light during a solar eclipse. Einstein becomes a global celebrity.



The Personal

Event: Divorce from Mileva Marić finalized (Feb 14, 1919).

The Agreement: Mileva receives the Nobel Prize money *if he wins it*, for the care of their sons.

The 1921 Nobel Prize in Physics

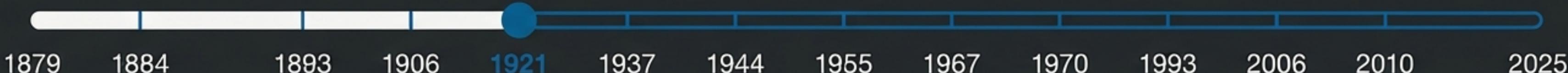


Citation: “For his services to Theoretical Physics, and especially for his discovery of the law of the photoelectric effect.”

Note: Relativity is absent from the citation due to its controversial nature.

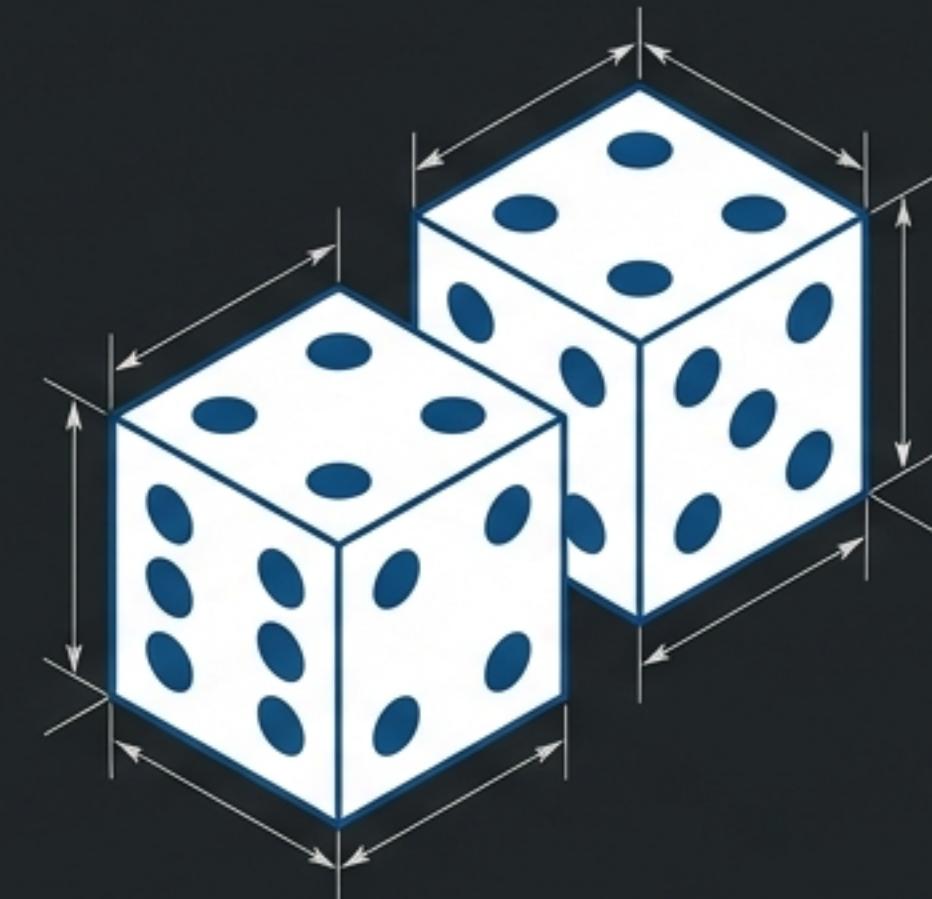
The Aftermath

Einstein transfers the prize money to Mileva Marić. She invests in Zurich real estate to support their son Eduard.



Context: “God Does Not Play Dice”

“I am convinced that He is not playing dice.” (Letter to Max Born, 1926).



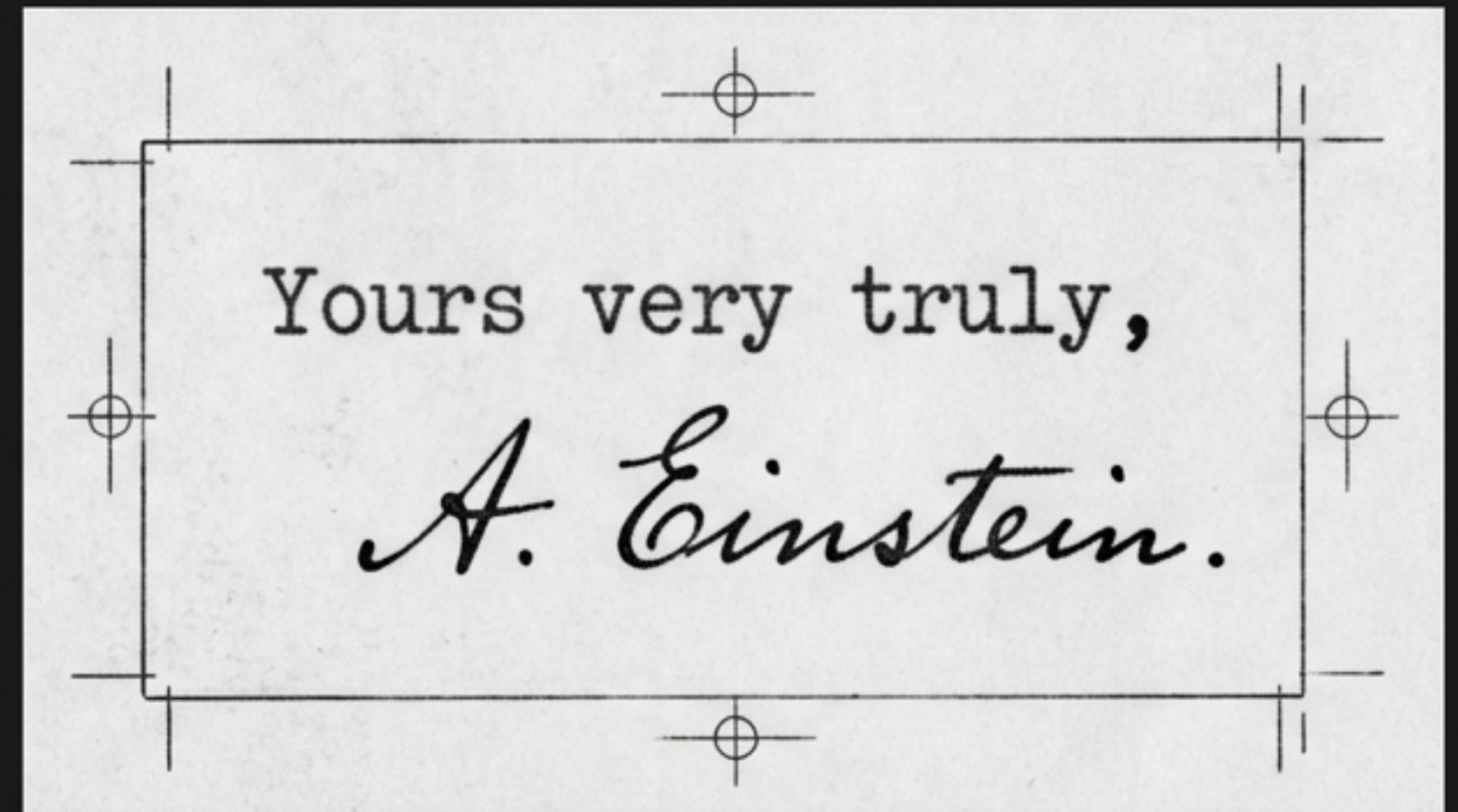
Clarification: Einstein did not reject Quantum Mechanics; he believed it was incomplete. He argued for “Hidden Variables” (Determinism) over Randomness. He rejected “spooky action at a distance” (entanglement). Status: Bell’s Theorem later ruled out local hidden variable theories.

Exile and The Letter (1933–1939)

1933: Hitler takes power. Einstein renounces German citizenship for the second time. Relocates to Princeton, NJ.

August 2, 1939: The Einstein-Szilárd Letter to FDR.

Warning: “The element uranium may be turned into a new and important source of energy” for bombs.



1939

The Conscience: Civil Rights

“Racism is a disease of white people.” (1946)

- **Membership:** Joined the NAACP and corresponded with W.E.B. Du Bois.
- **Action:** Co-chaired the American Crusade to End Lynching with Paul Robeson.
- **Personal:** Hosted Marian Anderson at his home when Princeton hotels refused her entry.

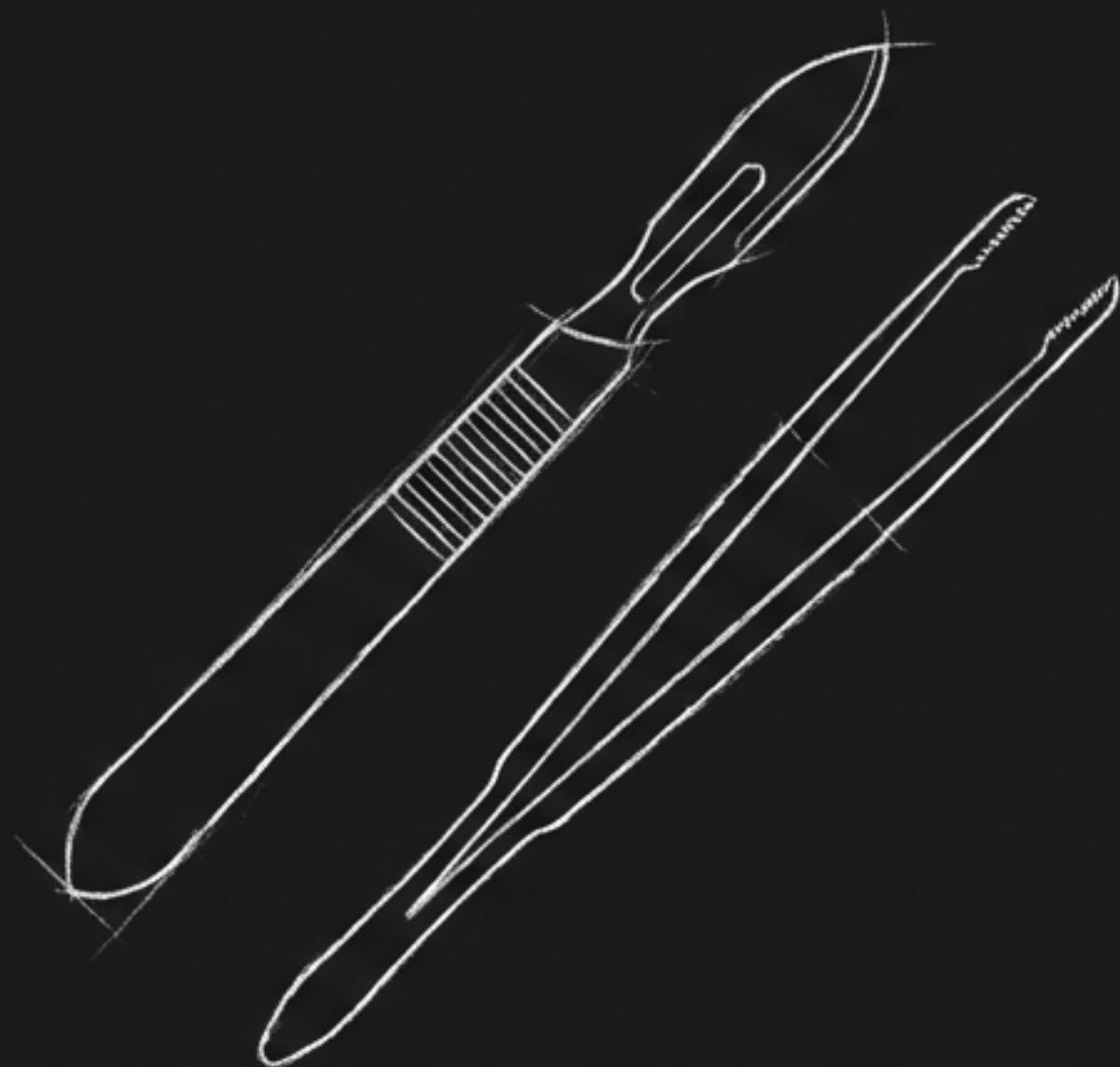
Israel and The Presidency (1948–1952)

1948: Israel declares independence. Einstein supports the homeland but warns against “narrow nationalism” and “borders and an army.”

1952: Einstein offered the Presidency of Israel.

Quote: “I am deeply moved by the offer... and at once saddened and ashamed that I cannot accept it. I have neither the natural ability nor the experience to deal with human beings.”

April 18, 1955: Death and Theft



Cause of Death: Ruptured abdominal aortic aneurysm. Refused surgery.

The Autopsy: Performed by pathologist Thomas Stoltz Harvey.

The Theft: Harvey removes the brain without family permission.

Data: Weight 1230g. Dissected into ~240 blocks. Preserved in celloidin.

1879

1955

2025

The Cider Box Years (1955–1990s)



1879

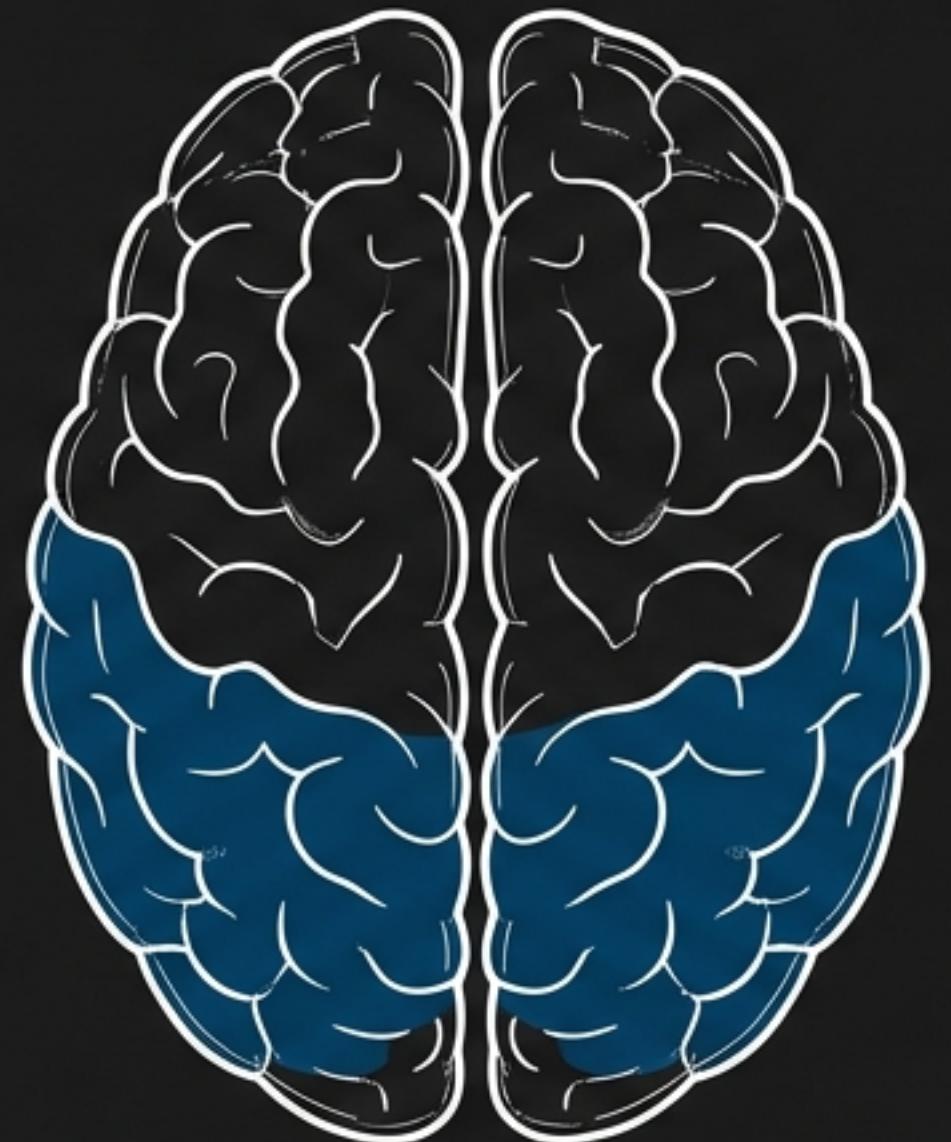


1955–1978: The brain vanishes. Kept in mason jars inside a cider box by Harvey as he moves across the US.

1997: Harvey drives the brain to California in a Buick Skylark.

1985 Diamond Study: First analysis finds significantly more glial cells in the left inferior parietal area. Suggests high metabolic need.

The Anatomy of Genius



- **1999 (Witelson Study):** Parietal lobes 15% wider than average (spatial reasoning).
Anomaly: Missing “Sylvian fissure” allowed closer packing of neurons.
- 2013 (Corpus Callosum): Thicker connections between hemispheres found.

The Unfinished Revolution

The Physicist.
Broke the
absolutes
of time and space.

The Human.
Flawed husband,
absent father,
fierce global
conscience.

The Specimen.
A biological
anomaly with a
mind that
visualized the
universe.

The brain sections remain at the National
Museum of Health and Medicine.

1879 —

2025
|

References & Source Material

Annalen der Physik: “On the Electrodynamics of Moving Bodies” (1905),
“The Foundation of the General Theory of Relativity” (1916).

Nobel Foundation: 1921 Prize in Physics Archive.

Wikipedia: Brain of Albert Einstein, Mileva Marić, Political views of Albert Einstein.

Scientific Studies: Diamond (1985), Witelson (1999), Men et al. (2013).

Video: Parth G - “What Einstein Actually Thought of Quantum Mechanics”.