

Rewrite of Physics by Einstein on Display



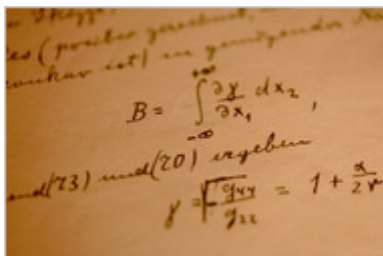
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In a room darkened to protect the paper, Israeli students on Tuesday inspected the manuscript of Albert Einstein's development of the general theory of relativity.

By [ETHAN BRONNER](#)

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JERUSALEM — There are pasted-on half pages, numerous cross-outs and insertions in meticulous penmanship and an open acknowledgment that some of the mathematics was beyond even him. Albert Einstein personally rewrote the laws of physics in a sparsely furnished central Berlin apartment nearly a century ago and the resulting manuscript, profoundly human and surprisingly moving to examine, has been put on display here for the first time.



Each of the 46 pages, labored over between November 1915 and their publication in May 1916, has its own case, each lighted dimly in a room that has been darkened to protect the paper. There on Page 1 is the now familiar title in German: “The Foundation of the General Theory of Relativity.”

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A detail of one of the pages. Einstein's wife Elsa donated the manuscript to the Hebrew University on the occasion of its opening in 1925.

The display of the work, which forced a redefinition of gravity, predicted the existence of black holes and illuminated how galaxies are formed, is at the center of the celebrations of the 50th anniversary of the Israel Academy of Sciences and Humanities. Out of concern for the life of the documents, it will be up only for the next three weeks.

“We have set it up like the Dead Sea Scrolls, to protect them but also to give the feeling of entering a kind of holy of holies, which is how we view it,” said Hanoch Gutfreund, a physics professor, former president of the Hebrew University and curator of the exhibition. “And you can actually see Einstein work as you look at the pages.”

Einstein’s wife Elsa donated the manuscript to the Hebrew University on the occasion of its opening in 1925 and in a letter he thanked her for doing so. A founder of the university and a member of its board, he donated all his papers to it upon his death.

And there, outside the room where the theory of general relativity is on display, are a few more of his papers, including a postcard he sent to his mother in 1919 after a British astronomer confirmed during an eclipse one of Einstein’s key predictions. It too offers a poignant mix of the celestial and personal.

“Dear Mother!” it begins, “Today some happy news. Lorentz telegraphed me that the British expeditions have verified the deflection of light by the sun.” So sorry, he adds, to hear that you are not feeling well.

Einstein’s relationship to Israel was complex. A self-described universalist, he became a Zionist when he witnessed anti-Semitism in Europe. Chaim Weizmann, Israel’s first president, was a key influence on him. Walter Isaacson, who wrote a 2007 biography of Einstein, said by telephone that Einstein wanted Jews to move here but did not back a separate Jewish nation-state until after it was declared in 1948.

Menahem Yaari, president of the Israel Academy, said that the institute was officially opened in 1960 by David Ben-Gurion, the country’s founding prime minister, with Martin Buber, the philosopher, as its first president. Buber had famously resigned his professorship in Frankfurt when Hitler rose to power. He settled in Jerusalem, setting an example for a generation of European Jewish scholars who followed him here, establishing the foundation of Israeli intellectual life.