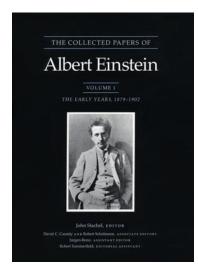
Mileva Einstein-Maric

(December 19, 1875 – August 4, 1948)



Of course she's brilliant! Why else would Albert Einstein be interested in her? Einstein was infatuated with her when they were classmates in Switzerland. They met as physics students at the Swiss Federal Polytechnic in Zurich, Switzerland (today known as the Federal Institute of Technology or ETH) in 1896. Of the 6 students in the first-year class, Mileva and Albert were the only two students majoring in physics; the other 4 were mathematics majors. Mileva would be the only female student out of these 6 students until they graduated. She was the fifth female student in the history of ETH. Until 1990, few people know that Einstein had two wives, the first of whom was trained in mathematics and physics while the second wife Elsa was nonscientific. This is the story of Mileva Einstein Maric who some people think may be a co-author or collaborator of Einstein in Einstein's famous papers published in 1905.

DISCOVERY OF LETTERS BETWEEN EINSTEIN AND MILEVA



The world first learned about Mileva Einstein Maric in 1986 when fifty-one letters that were in the possession of her son Hans Albert Einstein in Berkeley, California were released to the public. She became world famous when the first volume of *The Collected Papers of Albert Einstein* was published in 1987. The volume called *The Early Years, 1879-1902* talked about Einstein's youth, education, and early career. The volume included the first publication of the newly discovered letters between Einstein and Maric. All the letters appeared in the original German (Maric was fluent in German) with accompanying English translations. The first volume also brought attention to a little-known biography of Mileva Einstein Maric *Im Schatten Albert Einsteins. Das tragische*

Leben der Mileva Einstein- Maric (In the Shadow of Albert Einstein: The Tragic Life of Mileva Einstein Maric) written by a Serbian Science professor Desanka Trbuhovic-Gjuric. Originally

written and published in the Serbian language in 1969, it went through two German editions and four printings as well as one French translation, but it has never been published in English. In the biography, Trbuhovic-Gjuric wrote without citing a source or solid evidence that Mileva was a brilliant mathematician who surpassed Einstein in mathematics, if not physics. She said that Mileva was an unrecognized co-author of her husband's famous relativity paper of 1905. If her claims in the biography were true, then once again the contributions made by the wife of a great man would have been overlooked and lost to history! Einstein may have even suppressed the information! In her conversation with her family, she mentioned that their work would be published in the journal Annalen der Physik and her husband would become world famous!

Her science journey began when Mileva Maric was born on December 19, 1875, in the town of Titel in the Serbian province of Vojvodina on the southern border of Hungary. She was the daughter of Milos and Marija Maric. When she was a baby, it was discovered that she had a congenital dislocation of her left hip, a condition she inherited from her mother's side of the family. Mileva's sister Zorka also suffered from this condition. Because of this problem, Mileva walked with a noticeable limp.

In 1877, her family moved to Ruma, about 30 kilometers south of Novi Sad, the political and cultural capital of Vojvodina. Her father was appointed clerk of the district court of justice in Ruma. Mileva finished primary school in Ruma then enrolled in 1886 for the first year of middle school at the Serbian Higher Girls School in Novi Sad. Because of her limp, Mileva was teased by her classmates and this made her avoid other children. Her academic abilities were evident from primary school, and she showed the same abilities in middle school. Her father knew of her abilities and was determined to give her the best possible education - as far as her abilities would take her. After a year at the Serbian Higher Girls School, she transferred to another middle school, the Royal Lower Secondary School in Sremska Mitrovica - a school better able to challenge her academic talents. She was fourteen years old at that time and public school for girls was over at fourteen. Mileva was determined to continue her education and she and her father started looking for alternatives. They found a solution. Serbia, to the south of Vojvodina allowed women to enroll in universities and thus also allowed them to enroll in its gymnasia¹. She and her father headed across the border to the town of Sabac, Serbia, west of Belgrade, the capital of Serbia. She enrolled in the fifth of nine classes at the Royal Serbian Gymnasium. Once again, we see how a supportive parent, especially a father, can change the educational opportunity of a girl! But then Milos was appointed to another government job to Zagreb, the capital of Croatia. Mileva had to abandon her gymnasium class before she could complete her sixth gymnasium year. At Zagreb, Milos was able to obtain permission to enroll Mileva as a private student at the public male Royal Upper Gymnasium in Zagreb. Here she studied languages and physics. Her mathematics professor was Vladimir Varicak, a Croatian Serb mathematician and theoretical physicist. Since the school only permitted only boys to enroll in

¹ In much of Europe, a "gymnasium" is an academic high school.

physics, the fact that she obtained a special permission to study physics probably made her male classmates resent or even harass her. Her grades suffered but she persevered! As her male classmates got used to her, her grades improved.

After taking the final exams at the Royal Upper Gymnasium in Zagreb, Mileva and her father went to Zurich, Switzerland. Switzerland was one of the few European countries that admitted women to higher education. Many wealthy and aristocratic women who could afford the expense traveled to Switzerland and France from other nations that didn't allow women in universities. Typically, those who spoke German would go to Switzerland while those who speak French, like Marie Curie, would go to France. Mileva enrolled at Zurich's Higher Girl's School in November 1894 for the last years of preparatory schooling. The Zurich's Higher Girl's School not only prepared and encouraged the students to take the Matura examinations, but also expected them to pass. Mileva passed the Matura examinations in 1896. She took the exams not in Zurich but at the Swiss Federal Medical School in Bern, Switzerland to study medicine. But after attending courses at the University of Zurich medical program for the summer semester 1896, she decided to study physics and mathematics at the Swiss Polytechnic Institute where she would meet Albert Einstein.

SWISS FEDERAL POLYTECHNIC INSTITUTE or ETH Zurich



The Federal Institute of Technology -Zurich, or Eidgenössische Technische Hochschule (ETH) Zürich, was a public research university in Zurich, Switzerland. It was founded in 1854 to educate engineers and scientists. It was then the second-best university in Zurich, the top one being the University of Zurich. In Mileva's time it did not grant doctoral degrees but was primarily a teacher's and technical training institute.

Mileva enrolled in the Zurich Polytechnic's Department VI, the School for Mathematics and Science Teachers. She was the only woman in the freshman class of 6 students and she and Albert were the only physics majors; the other four students were mathematics majors.

There was no purely academic physics program. After fourteen years of prior schooling students entered ETH Zurich at a level comparable to the Junior year of an American college. There was no set curriculum. The professors worked out a course of study in consultation with each student. After two years the students took an intermediate diploma to continue their studies toward the diploma. At the successful end of four years, they would earn the diploma; this is like a master's degree in the American system of education. For the diploma they had to write a thesis and pass written and oral final exams. A diploma was required as certification for teaching.

The school did not grant a doctoral degree, but students who wished to obtain a doctoral degree could complete their dissertation research under the direction of the Swiss Polytechnic professor. But the University of Zurich would be the one to confer the degree, with the consent of its physics professor who served as the second referee. Polytechnic physics students pursuing a doctorate had to prepare a publishable dissertation demonstrating their expertise in experimental research. This usually took about a year. Those who wish to teach and do research at the university level had to receive in addition to the doctorate degree, a higher certification, Habilitation. This required submission of a high-quality original research publication and an oral examination in the candidate's field conducted by the entire faculty.

The Physics classes at the Swiss Polytechnic Institute were held at the newly constructed and well-equipped Institute for Physics which was divided into two sub-institutes. Each sub-institute was headed by a single full professor. Professor Heinrich Friedrich Weber was the Chair of the Institute for Mathematical and Technical Physics while Professor Jean Pernet was the Chair of the Institute for Experimental Physics.



Mileva and Einstein studied together a lot. They became close friends and study partners. They fell in love while hiking together in the summer of 1897. Einstein was attracted to her because she possessed qualities that mirrored Einstein's own personality. Their attraction was both an intellectual and spiritual one. He enjoyed and took pleasure in doing simple things with her such as walking together, making coffee, and even having a quarrel with her.

In the fall of 1897, Mileva went to Heidelberg, Germany as a registered auditor in lectures in physics and mathematics. As we have seen in previous years, she was always looking for classes that challenged her mental abilities. The math and science faculty at Heidelberg had admitted women in the early 1890s but the general admission of women did not occur until 1900. After one semester she returned to the Polytechnic and submitted to her student record an attendance certificate from the University of Heidelberg. During her time in Heidelberg, she and Einstein corresponded. Einstein initiated the correspondence with a four-page letter to Mileva. Perhaps she left to concentrate on her studies? Perhaps she was trying to escape the amorous advances of Einstein? Einstein sent her three letters during this semester.

After she returned to the Polytechnic, their relationship became even closer. Both passed their intermediate diploma examination. By summer 1899, he began calling her "Dollie" and signing his letters with his first name only. As they start their third year, they focused on beginning laboratory work in preparation for their thesis research. But both were also doing outside readings on theoretical physics. Both enrolled during the first semester in Jean Pernet's Physics Practicum for Beginners and in Weber's course Scientific Projects in Physics Laboratories during the second semester. Einstein also enrolled in Weber's laboratory course on electro-technology. He had some interest in electro-technology because this was his family's business. Einstein decided that Pernet's class was not necessary and did not attend the class. Pernet would not tolerate this behavior and failed him and gave him a grade of 1 out of 6. Mileva received a grade of 5 out of 6. Einstein continued reading on his own the topic he was interested -theoretical physics.

During the school year 1899-1900, they prepared for their final diploma exams. They also had to complete laboratory research projects for their diploma theses. Both enrolled during their fourth year in Professor Weber's Scientific Projects in Physics Laboratories. Einstein submitted a proposed experiment for his thesis, but Weber rejected it. Maybe because it was too similar to an earlier experiment by Armand Hippolyte Fizeau in France? Einstein then submitted a second proposal, an investigation of the relationship between the conductivities of heat and electricity in different materials in connection with the newly discovered electrons found to exist in all materials. But again, Weber rejected the proposal. Perhaps it was too simple, too theoretical, or too much a joint project with Mileva? No one knows why it was rejected! Finally, Mileva and Einstein worked out together a two-part project on heat conduction that they presented to Professor Weber. Finally, Weber accepted it! Mileva's project dealt with the temperature dependence of specific heats of various materials. Einstein got a low grade for non-diligence since the topic did not interest him.

In July 1900, both Mileva and Einstein took the written and oral diploma exams. Both got low overall grades owing to their low thesis grades. Both would have to do well in subject exams to counter the low thesis grades which were heavily weighted. Einstein passed and received the diploma. He was now certified as a Specialized Teacher in Mathematical Instruction.

Unfortunately for Mileva, she had a poor showing and was not granted a diploma. It is not exactly known how the Committee of Examiners came to recommend that Mileva not be given a diploma, since there was no minimum passing grade or other specific performance requirements. Failing to get a diploma devastated her! Yet, that did not stop her! She decided to take the exams again the following year.

By the time of their final exams in 1900, Mileva and Einstein, who now called each other Dollie and Johnnie decided to get married. They had become closer partners in the study of theoretical physics and even collaborators on Einstein's original research at that time. But Einstein's family were not too keen about the marriage proposal. Einstein's mother did not like Mileva because first she was older than Einstein, second, she has a birth defect and third, because of her career ambitions. Einstein's mother felt that Einstein needed a domestic housewife to nurture and care for him while he pursued his career. Both families also had financial problems so that they could not depend on their parents for financial support. If they got married without Einstein's parents' approval, Einstein would have to find a job to support them. They both had promises of paid assistantships with Weber before the exams but because Mileva did not pass the diploma exam, she was not qualified for the paid assistantship. And Weber abruptly withdrew his offer of paid assistantship to Einstein probably because of a personality conflict with Einstein.

Mileva and Weber were also arguing about the quality of her doctoral research. By the end of the year in 1901 Einstein had decided to become a theoretical physicist for his career. Theoretical physics was a discipline founded by European physicists because some of them were not able to access laboratories in experimental physics due to antisemitism. Einstein wanted to apply for a practical job in Vienna to earn a living and continue improving himself in theoretical physics so he could be a university professor. Mileva's goal was to get a doctorate in physics.

After failing to get assistantships at the Swiss Polytechnic, apparently under opposition from Weber and Pernet, Einstein started looking for assistantships with other professors in Germany and Austria. All his applications were rejected or unanswered. He believed Weber sabotaged his applications by giving him poor letters of recommendation. Einstein published his first paper on capillarity on March 1901 but even after its publication, no job offers came. Meanwhile he continued to work on his dissertation and instead of going through Weber he decided to submit it directly to Alfred Kleiner at the University of Zurich. Kleiner rejected it on the grounds that he was supposed to submit to Weber first then Kleiner as the second referee. Kleiner felt that Einstein was attacking ETH Zurich which failed to hire him. He did not submit another dissertation to Kleiner until 1905.

In April 1901 Einstein landed a temporary job as a tutor. At the same time the father of one of his classmates recommended him to the director of the Swiss Patent Office in Bern, the capital of Switzerland. He felt buoyed by the prospect of a stable job and asked Mileva to join him for a holiday in Lake Como in Italy. During that holiday, Mileva became pregnant. During this time

Mileva retook the diploma exam under stress, unmarried, and pregnant. She failed to get the diploma again! Albert was working in Bern while Mileva was living in Zurich.

LEISERL -THEIR FIRST CHILD

On February 2, 1902, Mileva gave birth to a baby girl while visiting her parents in Novi Sad. They named the girl Leiserl. The existence of this baby became known after the secret letters in possession of Hans Albert Einstein were made public! Einstein never saw the baby! It was put up for adoption. The baby would later die of scarlet fever.

MARRIAGE TO EINSTEIN

On January 6, 1903, Einstein and Mileva got married at the Bern Registry Office. No family members on either side attended the wedding. It was a traditional marriage! Einstein would be the main breadwinner of the family while Mileva would be a housewife first, scientist second. This must have been a hard role for Mileva to fulfill. Einstein worked eight hours per day, 6 days per week at the Patent Office. He also did private tutoring of students and continued his science research. Mileva was often alone at the house. In 1903, Einstein published the second of his three early papers on the fundamentals of statistical physics and the kinetic theory of molecules and atoms that formed the backdrop of his famous works of 1905.

STARTING A FAMILY AND ANNUS MIRABILIS

On May 14,1904, their oldest son, Hans Albert Einstein was born in Bern, Switzerland. They



called him Albert or little Albert. As little Albert grew, his father enjoyed making toys and playing with him.

Before Hans Albert's first birthday in 1905, Einstein started publishing papers in the journal Annalen der Physik. The papers came almost monthly. On March 18, 1905, he published his paper on the quantum hypothesis; on April 30, his second doctoral dissertation was submitted to the University of Zurich; on May 11, his paper supporting the atomic hypothesis in an explanation of the Brownian movement; on June 30, the special theory of relativity and on September 27, his paper introducing the equivalence of mass and energy. This flurry of scientific papers in one year was called the "Year of Miracles" or "Annus Mirabilis". It is plausible that Mileva helped in writing these papers, but we have no concrete evidence that the woman who was trained in physics and mathematics and who was Einstein's wife, confidante, and supporter contributed scientifically to these papers. We have family members and friends who witnessed Einstein and Mileva working through the night, studying, reading, and doing calculations, but there is no evidence even on the letters found in 1986 that she was a co-author of these papers. On the other hand, we know that Einstein was working 8 hours a day, 6 days a week at the Patent Office and doing some private tutoring during this time while his wife was at home taking care of little Albert. She would have more time to read, write, and do research. Einstein never mentioned his wife in the credits even though it is well known that she did some of the mathematical calculations on those papers. The only contribution he acknowledged was that of Michele Angelo Besso, a co-worker and friend at the Patent Office who has studied mathematics and physics at the University of Rome and mechanical engineering at the Swiss Polytechnic Institute.

Mileva seemed to have given up on her career and was happy staying home with little Albert. She had completed the 4-year physics program at the Swiss Polytechnic Institute but did not receive the diploma. If she were looking for a career, she could perhaps be a librarian at the University of Bern or work as a tutor. She seemed to have settled for the role of domestic partner and provider of practical support to her husband.

In 1906, Einstein received his doctoral degree from the University of Zurich. In 1907, he applied for 'habilitation" at the University of Bern. With the habilitation he would be qualified to teach at the university level and eligible for permanent appointment as a professor at any university. But the University of Bern refused to give him habilitation without the submission of an original habilitation thesis. He submitted a new paper on quantum physics and received the habilitation in February 1908. So, he began teaching part time at the University of Bern as a private lecturer. But the voluntary fees he received from the students was not enough for him to quit his job at the Patent Office.

In 1909, Kleiner asked the University of Zurich to hire Einstein as an associate professor in theoretical physics. In October 1909, he began offering his first lectures as a professor. In 1910, a German physical chemist, Wilhem Ostwald nominated Einstein for the Nobel Prize in Physics for his formulation of relativity theory. At this point Albert Einstein's career was steadily rising while Mileva's career was going nowhere. Her frustrations and increased isolation from friends and Einstein, whose attention was only focused on science, bothered and depressed her. Einstein quit his job at the Patent Office, and they moved from Bern to Zurich.



On July 28, 1910, she gave birth to their second son Eduard. It was a difficult birth, and she became ill after the delivery. The doctor diagnosed the prolonged illness as caused by overwork and suggested a live-in maid. Since they could not afford one on an associate professor's salary, Mileva's mother stayed with them. Einstein did not recognize Mileva's frustrations, bitterness, and sorrow following her failed exams, lost career, and lost child.

In March 1910, Einstein was offered a full professorship and director of the new institute of theoretical physics at the German Charles-Ferdinand University in Prague. Mileva was not happy about the move. Prague had poverty, unclean water, and a lack of play areas for the children. She felt like an outsider in science. When a physicist friend of Einstein visited him, he and Mileva met him at a café, but the conversation did not turn to science until after Mileva left to take care of the children. Einstein left her alone at home when he went to Germany for a meeting of the Society of German Scientists and Physicians.

In March 1912, Professor Weber died, and Einstein replaced him at the Swiss Polytechnic. They moved back to Zurich from Prague. Einstein began offering classes in theoretical physics. Although Mileva was happy that they moved back to Zurich, Einstein became more focused on his job and Mileva complained that physics was his number one priority with his family second in importance.

ELSA EINSTEIN LOWENTHAL

While attending a conference in Brussels in late 1911, Einstein decided to stop by Berlin to visit his mother who has moved there. He met his newly divorced first cousin Elsa. Elsa was his cousin on both sides, and he grew up with her. Elsa's father Rudolph Einstein was the first cousin of Albert's father while her mother was the sister of Einstein's mother. Her renewed acquaintance stirred a longing and desire that he hadn't felt for a while for his wife Mileva. Soon he and Elsa were writing letters secretly behind Mileva's back.

In July 1913, Max Planck and Walther Nernst gave Einstein an offer he couldn't refuse. They offered him a position as a paid member of the prestigious Prussian Academy of Sciences and a full professorship at the Humboldt University of Berlin without the obligation of teaching. Einstein visited Berlin in October and accepted the offer in December. During Christmas vacation, Mileva traveled to Berlin to look for a rental apartment. Mileva knew that the move to Berlin would not go well for her. Einstein's mother and Elsa would make life difficult for her! On March 21, 1914, Einstein moved to Berlin followed by Mileva and the children on April 19. The couple fought right away because Einstein had sublet a room in the apartment without telling Mileva. This was the start of the breakup of their marriage. Einstein was also having an affair with his cousin Elsa and Elsa was pressuring him to divorce Mileva. On July 28,1914, Austria-Hungary declared war on Serbia thus starting World War I. Mileva and the children moved back to Zurich the next day. Einstein apparently cried the whole afternoon after the children left for Zurich. He was devastated that he lost his children but now he could continue his extramarital affair with Elsa.

On February 14,1919 the divorce was granted by the Swiss Court. The grounds for divorce were adultery. Einstein married Elsa three and a half months later. Part of the divorce agreement was the financial support for Mileva and the children. In the agreement, Einstein promised to give Mileva the money he would receive if he won the Nobel Prize in Physics. In November 1922 Einstein won the Nobel Prize for Physics and the award of 120,000 Swedish kronor went to Mileva. Upon Mileva's request Einstein paid 45000 Swiss francs for the downpayment on a multifamily apartment building in Zurich where she and the boys would reside and live on the income from the rent.

One month after Einstein married Elsa in Berlin, an observation team led by the British astronomer Arthur Eddington detected the bending of starlight by the curved space near the sun - exactly as predicted by Einstein in his general theory of relativity. Einstein became extremely famous all over the world! While in Zurich, Mileva spent her days often ill and taking care of their son Eduard who has schizophrenia. She never remarried and died of a severe stroke in Zurich on August 4, 1948, at seventy-two years of age. She was interred at Nordheim-Cemetery in Zurich. Eduard Einstein was institutionalized until his death in 1965. Mileva's older son Hans Albert became a noted civil engineer and a professor at the University of California at Berkeley. His son Bernard Caesar became a physicist.

HER LEGACY

Mileva Einstein Maric will be forever known for her great promise, determination, and courage as an international pioneer for women in science at the turn of the century. A woman whose great promise in science was not fulfilled! One can only wonder what great contributions to science she would have achieved if she had not met Albert Einstein in college!

In 2005, Marić was honored in Zurich by ETH Zurich and the <u>Gesellschaft zu Fraumünster</u> (The Society of Fraumünster). The Society of Fraumünster is an organization in Zurich which is committed to adequately preserving the role of women in the history of the city of Zurich. A



memorial plaque was unveiled on her former residence in Zurich, the house Huttenstrasse 62, in her memory.

In the same year, a bust was placed in her high-school town, <u>Sremska Mitrovica</u>.

Another bust is located on the campus of

the <u>University of Novi Sad</u>. A high school in her birthplace of Titel is named after her. Sixty years after her death, a memorial was placed on the house of the former clinic in Zurich where she died.

The Serbian Community in Cleveland, Ohio also installed a bust in honor of Mileva at the Serbian Cultural Garden. The Serbian Cultural



Garden which was dedicated on October 5, 2008 features a central plaza with a marble cube and circular concrete seating. The plaza also contains the garden's message: "Only Unity Saves the Serbs." The garden holds several busts featuring famous Serbians such as inventor Nikola Tesla, King Peter I, founding father of Yugoslavia, and poet Petrovic-Njegos, an Orthodox Prince-Bishop and ruler of Montenegro.



The sculpture of Serbian scientist, mathematician, and physicist, Mileva Maric is shown on the left. She was also the wife and scientific partner of Albert Einstein. This sculpture is part of a bust-lined foot path in the Serbian Cultural Garden. It was done at the initiative of Alex Maceski, Serbian honorary consul in Ohio and the Office for Cooperation with the Diaspora of Serbia. It was made by the sculptor Ivan Felker. It was installed on June 28, 2016.



In June 2009, a memorial gravestone was dedicated to her at the Nordheim-Cemetery in Zürich where she rests.

In 1995, *Narodna knjiga* in <u>Belgrade</u> published (in Serbian) *Mileva Marić Ajnštajn* by Dragana Bukumirović,.

Three years later, in 1998, <u>Vida Ognjenović</u> produced a drama, *Mileva Ajnštajn*, which was translated into English in 2002. Ognjenović later adapted the play into a <u>libretto</u> for the opera *Mileva*, composed by <u>Aleksandra Vrebalov</u>, which premiered in 2011 in the <u>Serbian National Theatre</u> in Novi Sad.

HER SCIENCE JOURNEY

1875 - Mileva Maric was born in Titel, Vojvodina, Serbia

1886 - Finished Primary School in Ruma and enrolled at Serbian Higher Girls School in Novi Sad

1887 - Transferred to Royal Lower Secondary School in Sremska Mitrovica

1889 - Enrolled at the Royal Serbian Gymnasium in Sabac, Serbia

1990 - Enrolled at the public male Royal Upper Gymnasium in Zagreb as a private student

1894 - Mileva enrolled at Zurich's Higher Girl's School

1896 - Passed the Matura Exams and enrolled at ETH Department VI, the School for Mathematics and Science Teachers

1897 – Enrolled at the University of Heidelberg in Heidelberg, Germany as a registered auditor in lectures in physics and mathematics.

1899 - Started dating Albert Einstein, passed the intermediate diploma exam, prepared for final diploma exams

1900 - Failed the diploma exam but decided to start her doctoral thesis

1901 - Einstein got a job at the Swiss Patent Office in Bern and the family moved to Bern

1902 - Leiserl was born

1903 - Mileva and Albert Einstein got married

1904 - Hans Albert was born

1905 - Annus Mirabilis - Einstein published a flurry of scientific papers

1906 - Einstein received his doctoral degree

1908 - Einstein received habilitation and taught at Swiss Polytechinic

1909 - Einstein got a job at the University of Zurich so the family moved from Bern to Zurich

1910 - Eduard was born and Einstein offered full professorship in Prague, Mileva and children followed him in Prague.

1911 - Einstein met his cousin Elsa Einstein in Berlin while visiting his mother

1912 - Einstein succeeded Weber at the Swiss Polytechnic and the family moved back to Zurich

1913 – Einstein was offered a job in Berlin

1914 - Einstein and family moved to Berlin in April, World War I broke out in July and Mileva and the boys moved back to Zurich

1919 - Swiss court grants divorce to Einstein and Mileva, Einstein and Elsa get married 31/2 months after the divorce, Arthur Eddington detected the bending of starlight by the curved space near the sun, Einstein became a world celebrity

1948 - Mileva died in Zurich of a stroke

1995 - *Narodna knjiga* in <u>Belgrade</u> published (in Serbian) *Mileva Marić Ajnštajn* by Dragana Bukumirović,.

1998 - Vida Ognjenović produced a drama, Mileva Ajnštajn,

2005 - A memorial plaque was unveiled on her former residence in Zürich, the house Huttenstrasse 62. A bust was placed in her high-school town, <u>Sremska Mitrovica</u>

2009 - A memorial gravestone was dedicated to her at the Nordheim-Cemetery in Zürich where she rests.

2011 – The opera Mileva premiered at the Serbian National Theatre in Novi Sad.

2016 - A sculpture of Mileva Maric was installed in the Serbian Cultural Garden in Ohio

2019 - physicist and writer Gabriella Greison applied for the posthumous award of a degree to Mileva Maric at the <u>ETH Zurich</u>. After 4 months of discussions, the university denied the degree.

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