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**CircularTrip and ArcTrip: Effective Grid Access Methods
for Continuous Spatial Queries**

by

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The final copy of this thesis has been examined by the signatory and I
find that both the content and the form meet acceptable presentation
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PHYSICS AND APPLICATIONS OF OPTICAL LORENTZ FORCE

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Bejar, H. (1993) Perú. El neoliberalismo realmente existente. *Nueva Sociedad*, 127, 13-18.

Burga Barria, J. (2006) *El ocaso de la barriada. Propuestas para la vivienda popular*. Lima: Ministerio de Vivienda, Construcción y Saneamiento / Facultad de Arquitectura, Urbanismo y Artes-Universidad Nacional de Ingeniería

Burgos, Y. C., O. Valcarlos A., Violeta. (2003, diciembre) La globalización. Análisis e impacto en el Perú. *Producción y gestión*, 6(2), 20-26.

Calderón Cockburn, J. (2005) *La ciudad ilegal. Lima en siglo XXI*. Lima: Fondo Editorial de la Facultad de Ciencias Sociales / Unidad de Post-Grado de Ciencias Sociales

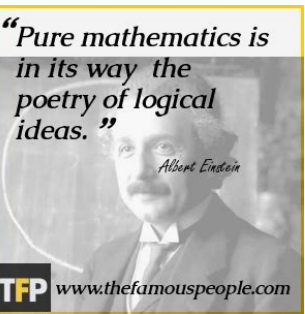
Calderón Cockburn, J. (2006) *Mercado de tierras urbanas, propiedad y pobreza*. Lima: Lincoln Institute of Land Policy / SINCO-Eónicos

Castellanos del Portal Therms, Joseph, J. U. M. (2003) Lima: ciudad cada vez menos pretenciosa [Visión Electrónica]. Recuperado marzo 15, 2008 desde <http://www.puc.ariasas.org/urbancenter/documents/21.lima/SistemaUrbano2.pdf>

Castells, M. (1995) *La ciudad informacional*. Madrid: Alianza Editorial.

Chion, M. (2002) Dimensión metropolitana de la globalización. Lima a fines del siglo XX. *EURE. Revista Latinoamericana de Estudios Urbanos Regionales*, 33(1085), 71-87.

Coccolletta, P. (2003) La metrópolis posocial. Buenos Aires, ciudad-ordeñ de la economía global. En A. Occhipinti Osasdon (Ed.) *Actas del Seminario Internacional. El desafío de las áreas metropolitanas en un mundo globalizado. Una mirada y Europa y América Latina* (pp. 203-233). Barcelona: Institut D'Estudis Territorials / Universitat Pompeu Fabra / Pontificia Universidad Católica de Chile.



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Albert Einstein (March 14, 1879–April 18, 1955), a German-born theoretical physicist who lived during the 20th century, revolutionized scientific thought. Having developed the Theory of Relativity, Einstein opened the door for the development of atomic power and the creation of the atomic bomb. Einstein is best known for his 1905 general theory of relativity, $E=mc^2$, which posits that energy (E) equals mass (m) times the speed of light (c) squared. But his influence went far beyond that theory. Einstein's theories also changed thinking about how the planets revolve around the sun. For his scientific contributions, Einstein also won the 1921 Nobel Prize in physics. Einstein also was forced to flee Nazi Germany after the rise of Adolf Hitler. It's no exaggeration to say that his theories indirectly helped lead the Allies to victory over the Axis powers in World War II, particularly the defeat of Japan. Known For: The General Theory of Relativity, $E=mc^2$, which led to the development of the atomic bomb and atomic power. Born: March 14, 1879 in Ulm, Kingdom of Württemberg, German Empire Parents: Hermann Einstein and Pauline Koch Died: April 18, 1955 in Princeton, New Jersey Education: Swiss Federal Polytechnic (1896–1900, B.A., 1900; University of Zurich, Ph.D., 1905) Published Works: On a Heuristic Point of View Concerning the Production and Transformation of Light, On the Electrodynamics of Moving Bodies, Does an Object's Inertia Depend on Its Energy Content? Awards and Honors: Barnard Medal (1920), Nobel Prize in Physics (1921), Matteucci Medal (1921), Gold Medal of the Royal Astronomical Society (1926), Max Planck Medal (1929), Time Person of the Century (1999) Spouses: Mileva Marić (m. 1903–1919), Elsa Löwenthal (m. 1919–1936) Children: Lieserl, Hans Albert Einstein, Eduard Notable Quote: "Try and penetrate with our limited means the secrets of nature and you will find that, behind all the discernible concatenations, there remains something subtle, intangible and inexplicable." Albert Einstein was born on March 14, 1879, in Ulm, Germany to Jewish parents, Hermann and Pauline Einstein. A year later, Hermann Einstein's business failed and he moved his family to Munich to start a new electric business with his brother Jakob. In Munich, Albert's sister Maja was born in 1881. Only two years apart in age, Albert adored his sister and they had a close relationship with each other their whole lives. Although Einstein is now considered the epitome of genius, in the first two decades of his life, many people thought Einstein was the exact opposite. Right after Einstein was born, relatives were concerned with Einstein's pointy head. Then, when Einstein didn't talk until he was 3 years old, his parents worried something was wrong with him. Einstein also failed to impress his teachers. From elementary school through college, his teachers and professors thought he was lazy, sloppy, and insubordinate. Many of his teachers thought he would never amount to anything. When Einstein was 15 years old, his father's new business had failed and the Einstein family moved to Italy. At first, Albert remained behind in Germany to finish high school, but he was soon unhappy with that arrangement and left school to rejoin his family. Rather than finish high school, Einstein decided to apply directly to the prestigious Polytechnic Institute in Zurich, Switzerland. Although he failed the entrance exam on the first try, he spent a year studying at a local high school and retook the entrance exam in October 1896 and passed. Once at the Polytechnic, Einstein again did not like school. Believing that his professors only taught old science, Einstein would often skip class, preferring to stay home and read about the newest in scientific theory. When he did attend class, Einstein would often make it obvious that he found the class dull. Some last-minute studying allowed Einstein to graduate in 1900. However, once out of school, Einstein was unable to find a job because none of his teachers liked him enough to write him a recommendation letter. For nearly two years, Einstein worked at short-term jobs until a friend was able to help him get a job as a patent clerk at the Swiss Patent Office in Bern. Finally, with a job and some stability, Einstein was able to marry his college sweetheart, Mileva Marić, whom his parents strongly disapproved. The couple went on to have two sons: Hans Albert (born 1904) and Eduard (born 1910). For seven years, Einstein worked six days a week as a patent clerk. He was responsible for examining the blueprints of other people's inventions and then determining whether they were feasible. If they were, Einstein had to ensure that no one else had already been given a patent for the same idea. Somehow, between his very busy work and family life, Einstein not only found time to earn a doctorate from the University of Zurich (awarded 1905) but found time to think. It was while working at the patent office that Einstein made his most influential discoveries. In 1905, while working at the patent office, Einstein wrote five scientific papers, which were all published in the *Annalen der Physik* (Annals of Physics, a major physics journal). Three of these were published together in September 1905. In one paper, Einstein theorized that light must not just travel in waves but existed as particles, which explained the photoelectric effect. Einstein himself described this particular theory as "revolutionary." This was also the theory for which Einstein won the Nobel Prize in Physics in 1921. In another paper, Einstein tackled the mystery of why pollen never settled to the bottom of a glass of water but rather, kept moving (Brownian motion). By declaring that the pollen was being moved by water molecules, Einstein solved a longstanding, scientific mystery and proved the existence of molecules. His third paper described Einstein's "Special Theory of Relativity," in which Einstein revealed that space and time are not absolutes. The only thing that is constant, Einstein stated, is the speed of light; the rest of space and time are all based on the position of the observer. Not only are space and time not absolutes, Einstein discovered that energy and mass, once thought completely distinct items, were actually interchangeable. In his $E=mc^2$ equation (E =energy, m =mass, and c =speed of light), Einstein created a simple formula to describe the relationship between energy and mass. This formula reveals that a very small amount of mass can be converted into a huge amount of energy, leading to the later invention of the atomic bomb. Einstein was only 26 years old when these articles were published and already he had done more for science than any individual since Sir Isaac Newton. In 1909, four years after his theories were first published, Einstein was finally offered a teaching position. Einstein enjoyed being a teacher at the University of Zurich. He had found traditional schooling as he grew up extremely limiting and thus he wanted to be a different kind of teacher. Arriving at school unkempt, with hair uncombed and his clothes too baggy, Einstein soon became known as much for his appearance as his teaching style. As Einstein's fame within the scientific community grew, offers for new, better positions began to pour in. Within only a few years, Einstein worked at the University of Zurich (Switzerland), then the German University in Prague (Czech Republic), and then went back to Zurich for the Polytechnic Institute. The frequent moves, the numerous conferences that Einstein attended, and preoccupation of Einstein with science left Mileva (Einstein's wife) feeling both neglected and lonely. When Einstein was offered a professorship at the University of Berlin in 1913, she didn't want to go. Einstein accepted the position anyway. Not long after arriving in Berlin, Mileva and Albert separated. Realizing the marriage could not be salvaged, Mileva took the kids back to Zurich. They officially divorced in 1919. During World War I, Einstein stayed in Berlin and worked diligently on new theories. He worked like a man obsessed. With Mileva gone, he often forgot to eat and sleep. In 1917, the stress eventually took its toll and he collapsed. Diagnosed with gallstones, Einstein was told to rest. During his recuperation, Einstein's cousin Elsa helped nurse him back to health. The two became very close and when Albert's divorce was finalized, Albert and Elsa married. It was during this time that Einstein revealed his General Theory of Relativity, which considered the effects of acceleration and gravity on time and space. If Einstein's theory was correct, then the gravity of the sun would bend light from stars. In 1919, Einstein's General Theory of Relativity could be tested during a solar eclipse. In May 1919, two British astronomers (Arthur Eddington and Sir Frances Dyson) were able to put together an expedition that observed the solar eclipse and documented the bent light. In November 1919, their findings were announced publicly. After having suffered monumental bloodshed during World War I, people around the world were craving news that went beyond their country's borders. Einstein became a worldwide celebrity overnight. It wasn't just his revolutionary theories; it was Einstein's general persona that appealed to the masses. Einstein's disheveled hair, poorly fitting clothes, doe-like eyes, and witty charm endeared him to the average person. He was a genius, but he was an approachable one. Instantly famous, Einstein was hounded by reporters and photographers wherever he went. He was given honorary degrees and asked to visit countries around the world. Albert and Elsa took trips to the United States, Japan, Palestine (now Israel), South America, and throughout Europe. Although Einstein spent the 1920s traveling and making special appearances, these took away from the time he could work on his scientific theories. By the early 1930s, finding time for science wasn't his only problem. The political climate in Germany was changing drastically. When Adolf Hitler took power in 1933, Einstein was luckily visiting the United States (he never returned to Germany). The Nazis promptly declared Einstein an enemy of the state, ransacked his house, and burned his books. As death threats began, Einstein finalized his plans to take a position at the Institute for Advanced Study at Princeton, New Jersey. He arrived at Princeton on Oct. 17, 1933. Einstein suffered a personal loss when Elsa died on Dec. 20, 1936. Three years later, Einstein's sister Maja fled from Mussolini's Italy and came to live with Einstein in Princeton. She stayed until her death in 1951. Until the Nazis took power in Germany, Einstein had been a devoted pacifist for his entire life. However, with the harrowing tales coming out of Nazi-occupied Europe, Einstein reevaluated his pacifist ideals. In the case of the Nazis, Einstein realized they needed to be stopped, even if that meant using military might to do so. In July 1939, scientists Leo Szilard and Eugene Wigner visited Einstein to discuss the possibility that Germany was working on building an atomic bomb. The ramifications of Germany building such a destructive weapon prompted Einstein to write a letter to President Franklin D. Roosevelt to warn him about this potentially massive weapon. In response, Roosevelt established the Manhattan Project, a collection of U.S. scientists urged to beat Germany to the construction of a working atomic bomb. Even though Einstein's letter prompted the Manhattan Project, Einstein himself never worked on constructing the atomic bomb. From 1922 until the end of his life, Einstein worked on finding a "unified field theory." Believing that "God does not play dice," Einstein searched for a single, unified theory that could combine all the fundamental forces of physics between elementary particles. Einstein never found it. In the years after World War II, Einstein advocated for a world government and for civil rights. In 1952, after the death of Israel's first President Chaim Weizmann, Einstein was offered the presidency of Israel. Realizing that he was not good at politics and too aged to start something new, Einstein declined the offer. On April 12, 1955, Einstein collapsed at his home. Just six days later, on April 18, 1955, Einstein died when the aneurysm he had been living with for several years finally burst. He was 76 years old.

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