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## Lovász Wins Kyoto Prize



László Lovász will receive 50 million yen (about US\$550,000) and the Kyoto Prize Medal.

**László Lovász** will receive the 26th annual Kyoto Prize in Basic Sciences, which for 2010 focuses on the field of mathematical sciences. The prize is awarded by the Inamori Foundation of Japan and consists of a diploma, a 20-karat-gold Kyoto Prize medal, and a cash gift totaling 50 million yen (approximately US\$550,000). Lovász, who is director of the Mathematical Institute at Eötvös Loránd University in Budapest and the current president of the International Mathematical Union, has been chosen for "outstanding contributions to mathematical sciences based on discrete optimization algorithms." The prize citation states: "Through his advanced research on discrete structures, Dr. Lovász has provided a link among various branches of mathematics in terms of algorithms, thereby influencing a broad spectrum of the mathematical sciences---including discrete mathematics, combinatorial optimization and theoretical computer science. In so doing, Dr. Lovász has made outstanding contributions to the advancement of both the academic and technological possibilities of the mathematical sciences." Lovász has solved several outstanding problems, including the weak perfect graph conjecture and the determination of the Shannon capacity of the pentagon. He is perhaps best known for the widely used Lovász local lemma, which provides a fundamental probabilistic tool for the analysis of discrete structures and contributes to the creation of a framework for probabilistically checkable proofs. The basis algorithm, commonly known as the "LLL algorithm," has also contributed to the construction of important algorithms and has become a fundamental tool in the theory of cryptography. [Read more about Lovász and the other Kyoto Prize winners](#) at the Inamori Foundation web site.

## Walter Rudin (1921-2010)



Rudin, noted author and professor emeritus at the University of Wisconsin-Madison, died May 20 at the age of 89. Rudin authored the texts *Principles of Mathematical Analysis*, *Real and Complex Analysis*, and *Functional Analysis*, which are used by many graduate students. The first two are often referred to as "Baby Rudin" and "Papa Rudin," respectively. Rudin was born in Austria. He and his family fled to France in 1938 after the *Anschluss*. They then moved to England in 1940 after France surrendered to Germany. He served in the British Navy during World War II and came to the U.S. after the war. In 1949 he received his PhD from Duke University. Rudin then became a C.L.E. Moore Instructor at MIT before joining the faculty at the University of Wisconsin-Madison. He won the AMS Steele Prize for Mathematical Exposition in 1993 for *Principles of Mathematical Analysis*, and *Real and Complex Analysis*. Rudin's autobiography, *The Way I Remember It*, was published in 1997. He is survived by his wife, Mary Ellen, a noted topologist who was also a mathematics professor at the University of Wisconsin-Madison, four children and four grandchildren. (Photo courtesy of Ken Ono.)