

## MARIO SZEGEDY: A MULTI-TALENTED COMPUTER SCIENTIST

Mario Szegedy is a two time Godel Prize winner and Professor of Computer Science at Rutgers University. Born in Budapest, Szegedy later came to the US and received his Ph.D. in Computer Science from the University of Chicago.

He then worked as a post doctor in several places before becoming a permanent member of Bell Labs and working there for seven years (he also worked for two additional years at AT&T Research). Afterwards, he conducted research at the Institute for Advanced Study in Princeton, New Jersey for a year.



Szegedy's research interests are very broad. He not only works in theoretical computer science, including complexity theory, algorithms, quantum computing, and programming languages, but he has also worked in combinatorics, combinatorial geometry, and algebra. Dr. Szegedy received the Goedel Prize twice, once in 2001 for his part in the PCP Theorem and its connection to inapproximability and again in 2005 for the analysis of data streams using limited memory.

He also founded QCteam, a quantum computing laboratory at Rutgers. The laboratory has received substantial funding from the University and from the National Science Foundation. It has a vigorous visitor program, and pursues collaborations with the local industry. He is also a very active member in DIMACS, the national research center for Discrete Mathematics and Theoretical Computer Science managed by both Rutgers University and Princeton University. Mario Szegedy is an energetic scientist who always generates new ideas in his research. Among his many outstanding research papers, some notable include:

- G. Kun and Mario Szegedy, A New Line of Attack On the Dichotomy Conjecture, *STOC 2009*, pp 725-734.
- J. Roland and Mario Szegedy, Amortized Communication Complexity of Distributions, *ICALP (1) 2009*: 738-749.
- Uriel Feige, Shafi Goldwasser, Laszlo Lovász, Shmuel Safra, Mario Szegedy, Interactive proofs and the hardness of approximating cliques, *Journal of the ACM*, v.43 n.2, p.268-292, March 1996.
- Alon, Noga; Matias, Yossi; Szegedy, Mario (1999), "The space complexity of approximating the frequency moments", *Journal of Computer and System Sciences* **58** (1): 137 - 147.