

Seth Lloyd

Seth Lloyd is Professor of Mechanical Engineering at MIT and a principal investigator at the Research Laboratory of Electronics. He is also adjunct assistant professor at the Santa Fe Institute. He works on problems having to do with information and complex systems from the very small—how do atoms process information, how can you make them compute, to the very large — how does society process information? And how can we understand society in terms of its ability to process information?

His seminal work in the fields of quantum computation and quantum communications — including proposing the first technologically feasible design for a quantum computer, demonstrating the viability of quantum analog computation, proving quantum analogs of Shannon's noisy channel theorem, and designing novel methods for quantum error correction and noise reduction — has gained him a reputation as an innovator and leader in the field of quantum computing. Lloyd has been featured widely in the mainstream media including the front page of *The New York Times*, *The LA Times*, *The Washington Post*, *The Economist*, *Wired*, *The Dallas Morning News*, and *The Times (London)*, among others. His name also frequently appears (both as writer and subject) in the pages of *Nature*, *New Scientist*, *Science* and *Scientific American*.