



## David Kaiser

MIT

Host: Huber

# How the Hippies Saved Physics

## Department of Physics Colloquium

In recent years, the field of quantum information science—an amalgam of topics ranging from quantum encryption, to quantum computing, quantum teleportation, and more—has catapulted to the cutting edge of physics, sporting a multi-billion-dollar research program, tens of thousands of published research articles, and a variety of device prototypes. This tremendous excitement marks the tail end of a long-simmering Cinderella story. Long before the big budgets and dedicated teams, the field moldered on the scientific sidelines. In fact, the field's recent breakthroughs derive, in part, from the hazy, bong-filled excesses of the 1970s New Age movement. Many of the ideas that now occupy the core of quantum information science once found their home amid an anything-goes counterculture frenzy, a mishmash of spoon-bending psychics, Eastern mysticism, LSD trips, and CIA spooks chasing mind-reading dreams. For the better part of a decade, the concepts that would, in time, blossom into developments like quantum encryption were bandied about in late-night bull sessions and hawked by proponents of a burgeoning self-help movement—more snake oil than stock option. This talk describes the field's bumpy transition from New Age to cutting edge.

