ORNL's (would-be) fusion experiment bites the dust

A proposed Oak Ridge fusion experiment, which has lingered in the early development stages for about a decade, isn't going to happen.

That's the word from Stan Milora, director of the fusion energy division at Oak Ridge National Laboratory. Milora said there's no funding for the Quasi-Poloidal Stellarator in the 2009 federal budget, adding, "It had exciting physics characteristics that hadn't been explored. We thought it was really great . . . But funding never came (for construction). DOE never requested it. It's time to move on."

Of course, most folks know that DOE informed Princeton earlier this year that it was scrapping the National Compact Stellarator Experiment. But that was different than QPS, which, according to Milora, could not actually be called a project because it never reached CD-2 (critical decision 2). It was a (roughly) $25 million proposal, a research and
That doesn't mean it didn't get attention and effort and brain sweat, and if it had been built, QPS no doubt would have made some unique contributions to how magnetic fields can be used to confine the super-hot plasma fuel of a fusion reactor. Milora once described the design of the QPS magnetic coils as looking like curling strands of linguini.

ORNL and UT actually established a Magnet Development Lab, doing research there. One of those noodle strands was being precision constructed by a California company out of cast steel, and it was going to be shipped to the Knoxville lab site, where workers would wrap it with copper windings to figure out how much that was going to involve.

"We would like to proceed just to see how much things really would cost because that's the major cost of stellarators," Milora said. But that, too, may come down to funding, which is in tight supply these days with in the fusion program -- especially given all the issues regarding the U.S. involvement in ITER, etc.

Oh, well. Goodbye, QPS.