## Star Wars 'research' to waste billions

What is the purpose of the President's Star Wars program anyway? Jim Courter, one of our local congressmen, who has become a leading advocate of "the program, recently tried to explain it to some Princeton students. According to Courter, the Strategic Defense Initiative (as the president prefers to call it) is only a research program to determine if it might be technologically feasible to defend the nation against nuclear missiles.

But if this is all the program were about, there would be no fuss. Almost everybody agrees that it is important to have researchers looking into the possibilities for defenses against nuclear weapons. Indeed, ever since the invention of nuclear-armed ballistic missiles, the U.S. has had a large and active research program in this area. Just prior to the Strategic Defense Initiative, this program was budgeted at a level of about one billion dollars a year — enough to allow many thousands of scientists and engineers to do a great deal of research.

DESPITE ALL this research, however, no really promising ideas have been developed. Nuclear weapons are so small, powerful and numerous that no systems have been proposed that could not be destroyed, outflanked or

## FRANK VON HIPPEL

outwitted at a small fraction of their construction cost. Our most effective protection against nuclear attack therefore continues to be the threat of nuclear retaliation.

In response to President Reagan's call to the scientific community to "give us the means of rendering these nuclear weapons impotent and obsolete," however, the Department of Defense put together a proposed Star Wars budget that is to rise to \$7 billion a year by 1989.

Does this mean that U.S. scientists and engineers will be working on seven times as many ideas for missile defense in 1989? Not at all! The only way the Defense Department knows how to spend that much money is to spend it on hardware. The president asked for action and the DOD is responding in the only way it knows how — building enormously expensive scale models and prototypes of the types of defense systems it has been able to design so far — systems that won't work.

Congressman Courter also pointed out that the Soviets have been spending far more on defensive systems than the U.S. There is a defensive system spending "gap," he says. This is true. The Soviets have for decades been spending more on defense than the U.S.—mostly on defenses against aircraft. But, in the past, congressmen knowledgeable about military matters have pointed to Soviet expenditures in this area not with awe but with glee as evidence that the Russians were obsessively wasting their money on systems that we could easily incapacitate or penetrate.

Inside government and the defense industry the critics of the Star Wars program have mostly been silenced. But the weaknesses of the systems that have been proposed are so obvious that former high-level defense advisors have been able to explain them easily in, for example, the October 1984 Scientific American. It seems clear that the emperor is once again running around unclothed.

Rep. Courter and his colleagues would therefore be doing us a greater service if, instead of trying to help the president finance his fantasy, they tried to sober him up.

Frank von Hippel, a physicist and just-past chairman of the Federation of American Scientists, is a professor of Public and International Affairs at Princeton University.