Strategic Missile Defense: Understanding its Limits

The United States has pursued defenses against nuclear-armed long-range ballistic missiles since at least the 1950s. The current incarnation, the Ground-based Midcourse Defense (GMD) system, has its technological origins in the 1990s; the system is designed to launch interceptors from Alaska or California toward incoming warheads, destroying them with the force of impact. The program was accelerated in 2002 by President George W. Bush, who directed the Pentagon to field the GMD system on an extremely aggressive schedule, nominally to respond to potential threats from North Korea and Iran.

Today, nearly 15 years later, the GMD program's price tag is \$40 billion and counting. Its test record is poor and it has no demonstrated ability to stop an incoming missile under real-world conditions. No credible strategy is in place to solve the issue of decoys and other countermeasures that an adversary could deploy to confuse the defense. Despite the system's struggles, Congress is pushing to expand the system to a new site, potentially in Michigan.

In this talk, I will take a look at how the GMD system is working and what its prospects are to contribute meaningfully to U.S. security, as well as how this balances against the risks inherent in pursuing strategic missile defense.