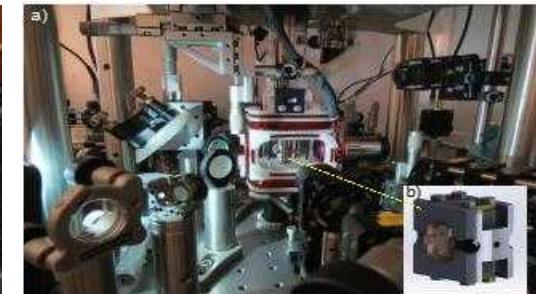
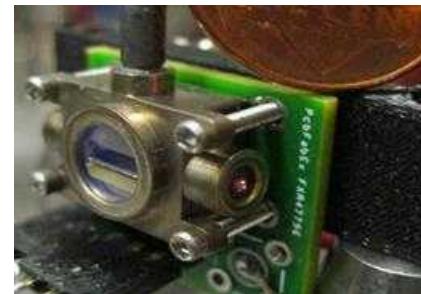


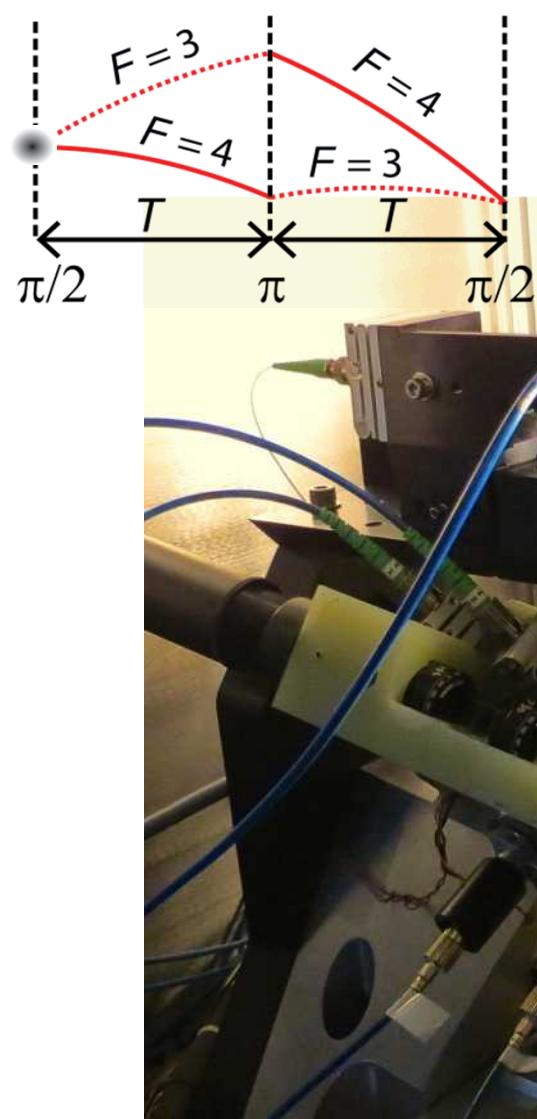
Deploying Quantum Sensors

*Exceptional service
in the national interest*



Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

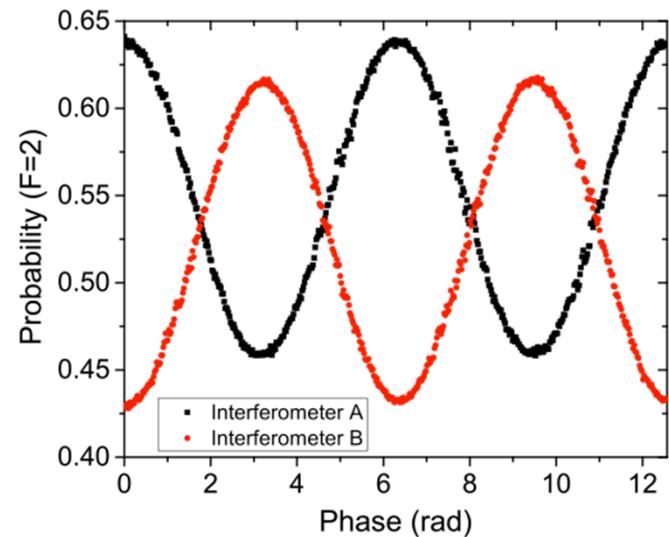
Sandia atom interferometer inertial sensor



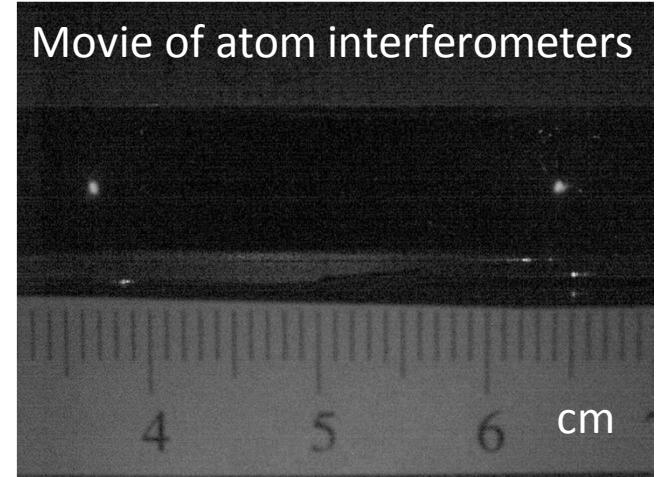
Picture of rotation/acceleration sensor

Fundamental
performance beyond
Navigation grade

PI: Grant Biedermann

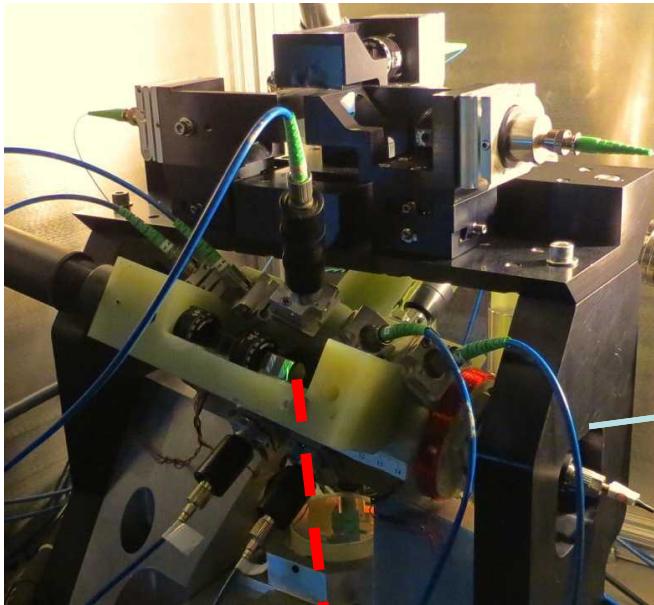


Movie of atom interferometers

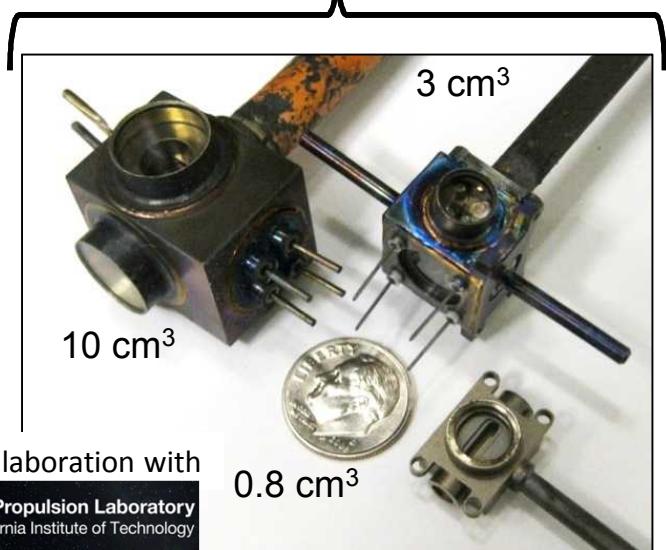


Cycle repeats at ~ 50 Hz

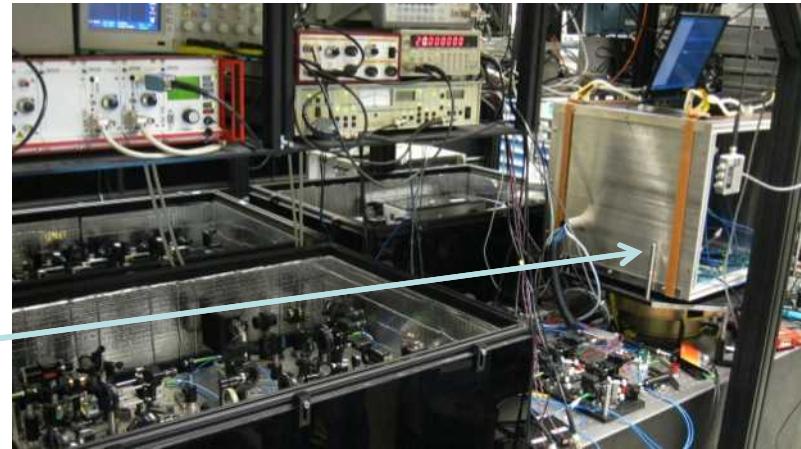
Sandia enabling capabilities



Next step: Miniature
vacuum cell



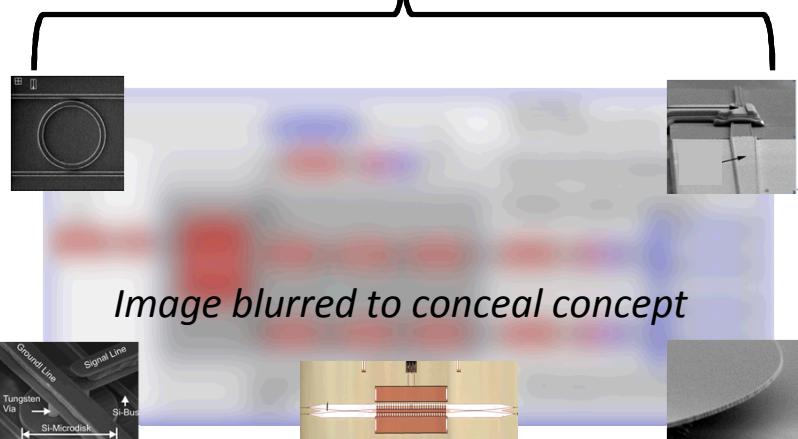
Picture of system hardware



Existing SOA laser system: Optical Table sized



Next step: Chip Scale
Laser System



Successful integration of atomic physics technology: DARPA IMPACT clock

PI: Peter Schwindt

Integrated Optics



Physics Package Interface



Vacuum Package

