



Prof. Shaoul Ezekiel

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Massachusetts Institute of Technology (MIT)

Wednesday, March 25, 2009

11:00 a.m. – 12:00 p.m.

BANK OF AMERICA BUILDING, ROOM 204

**The Amazing Laser-Based Gyroscope:  
Perhaps the most sensitive instrument in  
operation!**

*In order for the laser-based gyroscope to be useful for aircraft inertial navigation, it has to resolve a frequency difference of at least one part in a million million million! That's incredible but such gyroscopes are in daily operation in most airplanes today! The talk will present the key concepts underlying the operation of laser-based gyroscopes, the techniques used to achieve such a resolution, the problems that need to be overcome, and some possible approaches for achieving even higher resolution in the future.*