Abstract Submitted
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**Electron Paramagnetic Resonance – Nuclear Magnetic Resonance Three Axis Vector Magnetometer** MICHAEL BULATOWICZ, PHILIP CLARK, ROBERT GRIFFITH, MICHAEL LARSEN, JAMES MIRIJANIAN, Northrop Grumman - Navigation Systems Division — The Northrop Grumman Corporation is leveraging the technology developed for the Nuclear Magnetic Resonance Gyroscope (NMRG) to build a combined Electron Paramagnetic Resonance – Nuclear Magnetic Resonance (EPR-NMR) magnetometer. The EPR-NMR approach provides a high bandwidth and high sensitivity simultaneous measurement of all three vector components of the magnetic field averaged over the small volume of the sensor's one vapor cell. This poster will describe the history, operational principles, and design basics of the EPR-NMR magnetometer including an overview of the NSD designs developed and demonstrated to date. General performance results will also be presented.

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