

Abstract Submitted
for the SES10 Meeting of
The American Physical Society

Ideas on How to Improve the Inertial Navigation Systems ARGENTIS DA SILVA — Inertial navigation systems (INS) present some difficulties. For example, the drifting. Part of the problem is the integration. The readings of the system give the acceleration, this acceleration must be integrated over some time interval to get the velocity. And the velocity must be integrated to get the position. This double integration introduces much of the errors. Here we present an idea to get the position using only one integration and we show how to use the acceleration as a measure of the errors. The scheme make it possible to extend the autonomy and accuracy of the INS beyond the today values.

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Date submitted: 16 Aug 2010

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