



The Lecture Notes Series

The Integrated Navigation Technology (Lecture Notes)

Scope

After the first issue of the Journal of GPS of CPGPS was published in 2002, six years have been passed. As expected, so many professionals in GPS, navigation worldwide are interested in making their contributions to our journal. We are very thankful to the authors, reviewers, the Editorial Advisory Board and the Editorial Board for their professional enthusiasm.

In order to be more colorful and practical to the readers, the Editorial Board decided for a new special column, Lecture notes, which would focus on some specific topics in the form of lecture notes. In this way the Journal of GPS will be able to provide the high-level expertise to our readers, especially the professionals who just start to work in new areas and want quickly to learn the relevant essential knowledge. This can efficiently help university graduate students with studying the core technology of the relevant area through our lecture notes written by the world class experts from research and industrial sectors.

The first column topic that has been chosen is *the Integrated Navigation Technology*, which will focus on the aided inertial navigation technology including the relevant integration algorithms, hardware and software development, applications etc.

This column is expected to be activated in summer 2008. One or two contributions will be in each issue.

The Proposed Lecture Notes for the Integrated Navigation Technology

1. The modern positioning and navigation sensor technology.
2. Principles of inertial navigation & the mathematical Basis
3. Mechanisms of Strapdown Inertial systems
4. The error modeling of inertial systems.

5. The System Testing and calibration Approaches.
6. Leveling and Alignment algorithms of IMU
7. Shaping filters
8. Test Statistics in Kalman filter
9. Multi-sensor integration and System Design (Hardware & Software, Loosely & Tightly-coupled Integration).
10. Industrial Expertise (available products and applications)
11. The future trends of the integrated navigation.
12. Any other topics you would propose.

Call for Your Expertise

We are contacting you to ask for your support on

1. Are you interested in making your contribution to this special issue under the specified themes?
2. What paper will you contribute (the title and a short summary)?
3. What is the earliest time for you to deliver your paper?

Expected Due Dates

One or two contributions are expected for each of the issues starting from 2008. Please make your commitment as early as possible and send us your abstracts and the deliverable date of your whole transcripts. They should be submitted for reviewing upon the committed deliverable date. The publication arrangement runs on the basis of "first delivers, first serves" once your transcripts are accepted.

The Column Editor

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The Potential Contribution to Lecture Notes for JGPS, CPGPS

Surname		Given Name	
Title			
Specialty			
Contact Information	Company/Institution: Street: City State/Province Country Postal Code: Tel: Fax: Email:		
The Invited Topic			
Topic/Title ¹			
Abstract			
The deliverable date			
COMMENTS ²			

¹ You can select one or more proposed topics, or propose your own topic(s).

² Your suggestions, advice or any comments on this lecture notes are much appreciated.