

2018 9th ESA Workshop on Satellite Navigation Technologies and European Workshop on GNSS Signals and Signal Processing (NAVITEC 2018)

**Noordwijk, Netherlands
5-7 December 2018**



**IEEE Catalog Number: CFP1840L-POD
ISBN: 978-1-5386-7126-9**

**Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1840L-POD
ISBN (Print-On-Demand):	978-1-5386-7126-9
ISBN (Online):	978-1-5386-7125-2
ISSN:	2325-5439

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

ULTRA-SPARSE BINARY LDPC CODES WITH CSK SIGNALS FOR INCREASED DATA RATES IN FUTURE GNSS.....	1
<i>Rémi Chauvat ; Axel García Peña ; Marco Anghileri ; Jean-Jacques Floch ; Matteo Paonni</i>	
PERFORMANCE OF AN ADAPTIVE PARTITIONED VECTOR TRACKING ALGORITHM WITH REAL SCINTILLATION DATA.....	12
<i>José M. S. V. Marçal ; Fernando D. Nunes ; Fernando M. G. Sousa</i>	
STATE-SPACE ESTIMATION OF IONOSPHERIC SCINTILLATION PROCESSES WITH A STATIC GNSS RECEIVER.....	20
<i>Fernando M. G. Sousa ; Fernando D. Nunes</i>	
STATISTICAL CHARACTERIZATION OF IONOSPHERIC SCINTILLATION USING A PHASE-SCREEN MODEL.....	28
<i>Fernando D. Nunes ; Fernando M. G. Sousa ; Jose M. V. Marcal</i>	
THE GNSS LABORATORY TOOL SUITE (GLAB) UPDATES: SBAS, DGNSS AND GLOBAL MONITORING SYSTEM.....	36
<i>D. Ibáñez ; A. Rovira-García ; J. Sanz ; J.M. Juan ; G. González-Casado ; D. Jimenez-Baños ; C. López-Echazarreta ; I. Lapin</i>	
MEASURED GPS PERFORMANCE UNDER LTE-M IN-DEVICE INTERFERENCE.....	47
<i>Olli Apilo ; Mikko Hiivala ; Atte Kuosmonen ; Jani Kallankari ; Hamid Amin ; Mika Lasanen ; Markus Berg ; Aarno Pärssinen</i>	
A DUAL ANTENNA GNSS SPOOFING DETECTOR BASED ON THE DISPERSION OF DOUBLE DIFFERENCE MEASUREMENTS.....	54
<i>Van Hien Nguyen ; Gianluca Falco ; Mario Nicola ; Emanuela Falletti</i>	
IMPACT OF ISSUE OF DATA UPDATE PERIODS ON SATELLITE-BASED AUGMENTATION SYSTEMS.....	62
<i>Ivan Lapin ; Jaron Samson ; Stefan Wallner ; Mikael Mabillean ; Pierre Durel</i>	
ANALYSIS OF THE CHIMERA TIME-BINDING SCHEME FOR AUTHENTICATING GPS L1C.....	72
<i>Anna Poltronieri ; Gianluca Caparra ; Nicola Laurenti</i>	
PERFORMANCE ANALYSIS OF FLL SCHEMES TO TRACK SWEEPED JAMMERS IN AN ADAPTIVE NOTCH FILTER.....	78
<i>Micaela Troglia Gamba ; Emanuela Falletti</i>	
ON THE USE OF CSK FOR GNSS ANTI-SPOOFING.....	86
<i>Gianluca Caparra ; Nicola Laurenti</i>	
EFFECTS OF INTERFERENCE MITIGATION METHODS ON SCINTILLATION DETECTION.....	93
<i>Wenjian Qin ; Fabio Dosis</i>	
POSITIONING AND TIMING IN THE MIMO-GNSS FRAMEWORK.....	101
<i>J. A. García-Molina ; J. A. Fernández-Rubio</i>	
A SOFTWARE-DEFINED SPACEBORNE GNSS RECEIVER.....	106
<i>C. Fernández-Prades ; J. Arribas ; M. Majoral ; A. Ramos ; J. Vilá-Valls ; P. Giordano</i>	
ESTIMATION OF THE BASE STATION POSITION ERROR IN A RTK RECEIVER USING STATE AUGMENTATION IN A KALMAN FILTER.....	115
<i>Paul Thevenon ; Jérémy Vezinet ; Patrick Estrade</i>	
Author Index	