International Workshop on Satellite and Space missions: Developments and Applications

04-05 June 2016, Cataract Hotel, Cairo, EGYPT

General Program

Day 1- Saturday 04 June 2016, Room A

No of papers	Time	Title and Speakers
	8:00—10:00	Registration
	10:00—11:00	Welcome and honorable Speeches
	11: 00--11:30	**Coffee Break**
	11:30 -13:30	Session 1- Attitude Dynamics and Formation Control Chair of the session. Prof. DSC, H. M. Yehia and Prof. Balbir Singh
1	11:30—12:00	Attitude system design: balancing real satellite and analysis complexity Mikhail Ovchinnikov
2	12:00—12:30	Optimal Control for Lorentz –Augmented Spacecraft Formation Flying Yehia Abdel-Aziz
3	12:30—12:45	Control law Design for Satellite Tracking Mode Abdel-Hady Elbeltagy
4	12:45—13:00	Interactive user interface for multiple attitude representation and estimation techniques A. Refaat Hamed
5	13:00—13:15	Identifying the Attitude of Dynamic systems using Neural Network Ahmed M.EL Dakrory
6	13:15—13:30	Design and Performance Study of a Low Thrust Spacecraft Trajectory using Hybrid Optimization Technique Kumud Yadav
7	13:30—13:45	Fuzzy control for the sequential switching shunt regulator Ahmed Kamel
	13:45---14:45	**Lunch Break**
	14:45—16:00	Session 2- Space Environment and its interaction with Spacecraft Chair of the session. Prof. Benjamin Ayantunji and Prof. Makram Ibrahim
8	14:45—15:15	Spacecraft Charging and Discharging: Ground Test in NRIAG- EGYPT Afaf Abd EL-Hameed
9	15:15—15:30	Characterization of the Outgassing of Spacecraft Materials Ahmad Anwar
10	15:30—15:45	Development of the Digital Solar Spectrograph Station in Helwan for Solar Variability Observations Ahmed Ghitas
11	15:45—16:00	Optical Characteristics for Surface Images of Gold Thin Films Deposited on Polymer Substrate Maroof A. Hegazy
	16:00—16:30	Coffee Break

	16:30—18:00	Session 3- Space Environment and its interaction with Spacecraft Chair of the session. Dr. Tom Segert and Dr Mohamed Kassab
12	16:30—17:00	Space radiation in (commercial) human space flights and potential countermeasures Irene Schneider
13	17:00—17:15	First observed Coronal Mass Ejection from the Middle East using Cosmic Rays Ismail Sabbah
14	17:00—17:15	Satellite Health data Monitoring, Anomaly Detection and Diagnosis via PLS Batch Modelling Ahmad M. Al-Zaidy
15	17:30—17:45	Probing relationship between solar activities and seismicity during weak solar cycle 23 Mohamed Ahmed Semeida
16	17:45—18:00	Preliminary assessment of space radiation environment and its impact on the small sat materials Esraa A. El-Aziz
	18:00—19:00	Session 4- Poster Session Chair : Prof. Gamal Attia and Dr. Ahmed Farrag
17		Optimal Time Slew Maneuver Using Single Gimbal Control Moment Gyro for Small Agile satellites Mohamed A. Elkhayat
18		Analysis and simulation of aerial unmanned vehicle using pure pursuit guidance law Ahmed Elsawi
19		Robust Nonlinear Combined Attitude Control Algorithm Using Control Moment Gyro for Agile Satellites Mohamed A. Elkhayat
20		Single Event Upset Characterization for LM124 Operational Amplifier Using Picosecond Pulsed Laser System Amira Hussein
21		Comparative Analysis Of Eol Performance For Different Space Solar Cells Using Two Different Approaches Dina Said
22		On The Classifications of The Solar Activr Regions (Ars) Wael Ahmed
23		Modified Cloud Method Validation For Determing Physical Parameters Of A Moderate Flare On June 26, 1999 Mohamed Semeida
24		New Age Cybernetic Game Theory WHAT “is” BEST Pedagogy & Emergency Management for User/GROUPS J. Allen Sprute
25		Active Infaltable De-orbitting device for Cubesat Mohamed A. Abo Arais

26		Short Arc Technique for Baselines Déterminations Gamal F.Attia
27		Simulation of J_2 Invariant Relative Polar Orbits Conditions Shaheera A. Altalhi
28		Effects Of Gravitational Waves Emission On The Orbits Of the Binary Neutron Stars Considering The Mass Variation Zeinab A. Mabrouk
29		Orbit Determination Modeling Analysis by GPS Ahmed Adel Abd-Elhamed
30		Modelling and Computational Analysis of Rarefied Flow Field for Hypersonic Re-entry Vehicles Yuvi Nanda
31		FM Transmitting and imaging Pico-satellite based on open source tools Mohamed A. Abo Arais
32		Recovery of the Failure in Satellite Power Subsystem by Using Reconfigurable Power Conditioning Unit Hend Nabil
33		IMPORTANCE OF RADIO TELESCOPES Ikape Margaret
34		Comparative Study Between Silicon & Gallium Arsenide ON Grid PV System Mahmoud M Ismail
35		High power S-band satellite power amplifier design and analysis Ahmed Esmail Ahmed
36		Development of an SMS controlled car Security system Via Voice recording and image capturing Adewumi Adebayo Segun
37		Using satellite images to monitor and model urban land use change in Alexandria, Egypt Lotfy Kamal AZAZ
38		Monitoring Land Use Land Cover Changes on Suez Canal region using Remote Sensing Wael Mohamed Sayed

International Workshop on Satellite and Space missions: Developments and Applications
04-05 June 2016, Cataract Hotel, Cairo, EGYPT
General Program

Day 2- Sunday 05 June 2016, Room A

	Time	Title and Speakers
	9:00 —11:00	**Session5: Space Mission and Satellite Subsystem** Prof. Mikhail Ovchinnikov and Dr. Aymen Ahmed
39	9:00—9:30	Kent Ridge 1 – First in-orbit results of a novel hyper spectral small satellite mission Tom Serget
40	9:30—9:45	Design And Implementation Of Space Qualified Camera Computer System Using Commercial Of The Shelf Components Aymen Ahmed
41	9:45—10:00	Implementing QPSK Modulator with Low Resources Utilization and Power Consumption for Satellites Communication Systems using Kintex-7 Mohamed El-Hady
42	10:00—10:15	Environmental Testing of Space Deployment Mechanism (SDM) for Solar Array (AS) of Small Satellite Mohamed Kassab
43	10:15—10:30	Failure modes, effects and criticality analysis Of LEO satellite solar array Ahmed Refaee
44	10:30—10:45	Mechanical properties and wear behavior of short basalt Fiber reinforced acrylonitrile-butadiene-styrene as a new composite material Hesham Fathy
45	10:45—11:00	Modeling of Nonlinear Errors for Integrated GPS/MEMS-based INS Navigation Systems Maged Ismail Mohamed
	11:00—11:30	**Coffee Break**
	11:30—13:30	**Session6: Space Mission and Satellite Subsystem** Prof. Rabab Helal and Dr. Dr. RasıtAbay
46	11:30—12:00	Space Tribology and its applications in Spacecraft Mechanisms. Balbir Singh
47	12:00—12:15	Failure detection module for satellite failure management system. Noran Tobar
48	12:15—12:30	3D Scene Construction – Live Scene Streaming Virtual Reality Enabled Can-Sat Mohamed A. Abo Arais
49	12:30—12:45	IMPLICATIONS OF COMMERCIAL EARTH OBSERVATION SATELLITES ON THE SOVEREIGNTY OF NATIONS Mujahid Indabawa

50	12:45—13:00	Space Missions and their impact in field of stellar astrophysics Somaya Saad
51	13:00—13:15	Performance Assessment of ANN in Estimating Remotely Sensed Extracted Bathymetry: Case Study: Eastern Harbor of Alexandria Omar Makboul
52	13:15—13:30	Space-Based Solar Laser System Simulation to Transfer Power onto the Earth Yasser A. Abdel-Hadi
	13:30—14:30	**Lunch Break**
Day 2- Sunday 05 June 2016, Room A		
	14:30—16:00	**Session7: Orbital Mechanics** Prof. Khalil I. Khalil and Dr. Mohamed Ibrahim
53	14:30—14:45	Modeling of two stage Launch Vehicle trajectory Assem Sallam
54	14:45—15:00	Orbit Determination Software “Or Det” with graphical representation Assem Sallam
55	15:00—15:15	Orbit Determination Modeling Using GPS coupled with Earth Geopotential Ahmed Badwy
56	15:15—15:30	Improved Two Line Element Sets Using Kolmogorov Arnold Moser Orbit Determination Rasıt Abay
57	15:30—15:45	Canonical Formulation for the Laser Orbital Perturbations Nabawia Khalifa
58	15:45—16:00	Initial orbit determination from observation for low earth orbit Ahmed Magdy Abdelaziz
	16:00—16:30	**Coffee Break**

Day 2- Sunday 05 June 2016, Room B		
	14:30—16:00	**Session8: Remote Sensing and Satellite's Applications** Prof. Ahmed Ghitas and Prof.Benjamin Ayantunji
59	14:30—14:45	Some Applications of Satellite Data in Improving the Geodetic Infrastructure in Saudi Arabia Abdulaziz Alothman
60	14:45—15:00	Comprehensive Study of the Atmospheric Effects on Terrestrial and Satellite Communications over Nigeria Benjamin Ayantunji
61	15:00—15:15	Effect of differential code biases on the GPS CORS network: a case study of Egyptian Permanent GPS Network (EPGN) Ashraf Mousa
62	15:15—15:30	Performance of the GIS interpolation techniques to estimate the accumulated sediment in Nubia Lake, Sudan. Mohamed Elsahabi
63	15:30—15:45	Analysis of Smear Effect in High Resolution Remote Sensing Satellites Walid Wahballah
64	15:45—16:00	Modeling of tropical rain rate & raindrop size distributions for application in rain Attenuation prediction on Earth-Space paths Kingsley Orisekeh
	16:00—16:30	**Coffee Break**
Day 2- Sunday 05 June 2016, Room B		
	16:30—17:45	**Session9: Remote Sensing and Satellite's Applications** Prof. Ashraf Mousa and Prof. Abdulaziz Alothman
65	16:30—16:45	Study Of Surface Radio Refractivity Variations Across Some Selected Cities In Nigeria Musa Bawa
66	16:45—17:00	Performance Assessment of ANN in Estimating Remotely Sensed Extracted Bathymetry: Case Study: Eastern Harbor of Alexandria Omar Makboul
67	17:00—17:15	Using GIS for landfill site selectionCase study from Oman Lotfy Kamal AZAZ
68	17:15—17:30	Comparison of MODIS Satellite Aerosol Optical Depth Retrievals Based on Airborne Measurements Data during Helwan 2014-2015 U. Ali Rhoma
69	17:30—17:45	Applications of thermal remote sensing for mapping anomalies in land surface temperaturesof basaltic lava fields (Harrat) – Hail – Saudi Arabia Mohamed E. Hereher
	17:45-18:15	**Closing Session (Room A)**