

I INTERNATIONAL SEMINAR ON REMOTE SENSING APPLIED TO FOREST MENSURATION

Abstract: The idea of holding the aforementioned seminar arose from an existing partnership between the Department of Forest and Wood Sciences at UFES, through its Mensuration and Forest Management laboratory, the University of Maine in the United States, Budapest University of Technology and Economics and the Universidad Tecnológica Indoamérica of Ecuador. The institutions mentioned are currently developing some joint research projects, one of which is supported by CNPq, whose main focus is the research of new methodologies fundamentally based on remote sensing, seeking to improve the performance of forest inventories, in order to make them faster, at a lower cost, more accurate and with a more detailed level of information. With the aim of disseminating some research results within the group itself, it was considered that it would be more productive to share information with peers on a larger scale, involving not only great academics, but also technicians who work with this theme in large companies or institutions and that can add their experiences in order to move towards developing innovative and effective solutions to solve real world problems.

Date: The forecast for holding the Seminar is from June 20 to 22, 2023.

Location: Auditorium of the Department of Forest and Wood Sciences at UFES in the city of Jerônimo Monteiro, ES.

EXPECTED EVENT SCHEDULE

Schedules	Activities
Day 20 - Tuesday	
07:00 – 08:00	Registration of congress participants and collection of materials
08:00 – 08:30	Event opening ceremony
08:30 – 09:20	Lecture 1: Estimating dendrometric information of secondary tropical forests with data obtained by DRONE Speaker: André Quintão de Almeida - Federal University of Sergipe, Sergipe, Brazil
09:20 – 10:10	Lecture 2: Forest giants: how trees were located and measured in the Amazon rainforest with LiDAR data? Speaker: Eric Bastos Gorgens - Federal University of the Jequitinhonha and Mucuri Valleys, Minas Gerais, Brazil
10:10 – 10:40	Coffee Break
10:40 – 11:30	Lecture 3: Forest modeling with LiDAR: history, requirements, advantages and perspectives Speaker: Diogo Nepomuceno Cosenza - Federal University of Viçosa, Minas Gerais, Brazil

11:30 – 12:20	Poster presentation / Roundtable / Questions and answers
12:20 – 13:30	Lunch time
13:30 – 14:20	Lecture 4: Bracell Lidar Solutions Speaker: Cristiano Rodrigues Resi e Tais Rufino
14:20 – 15:10	Lecture 5: Remote sensing applications at Eldorado Brasil Speaker: Daniel Binoti - Forest Planning and Mensuration Coordinator at Eldorado Brasil Celulose S.A Company
15:10 – 16:00	Lecture 6: Orbital models to monitor forest growth at Suzano Speaker: Henrique Ferraço Scolforo
16:00 – 16:30	Coffee Break
16:30 – 17:20	Lecture 7: Mapping and characterization of forest plantations in Brazil: a national satellite inventory. Speaker: Fábio Guimarães Gonçalves - Canopy Remote Sensing Company
17:20 – 18:00	Poster presentation / Roundtable / Questions and answers
Day 21 - Wednesday	
08:10 – 09:00	Lecture 1: Close range fluorosensors for analysing plant leaves or water quality Speaker: Sándor Lenk - Budapest University of Technology and Economics - Hungary
09:00 – 09:50	Lecture 2: Recovering the city and its peripheries: data science and experimental design applied to monitoring, management and restoration of urban and peri-urban lands Speaker: Santiago Bonilla-Bedoya - Universidad Tecnológica Indoamérica, Ecuador
09:50 – 10:20	Coffee Break
10:20 – 11:10	Lecture 3: Acquisition of a multi-scale hyperspectral and LiDAR imaging system Speaker: José Eduardo Meireles - University of Maine, United States of America
11:10 – 12:00	Poster presentation / Roundtable / Questions and answers
12:00 – 13:00	Lunch time
13:00 – 13:50	Lecture 4: Harmonic Constraints of Structure and Function of Forests Viewed in Fourier Space Speaker: Robert Treuhaft - JPL/NASA, United States of America
13:50 – 14:40	Lecture 5: Biomass estimation in tropical forests using multisensor approach Speaker: Polyanna da Conceição Bispo - University of Manchester, England
14:40 – 15:30	Lecture 6: Use of Advanced Remote Sensing 3D tools for Sampling and Enhanced Forest Inventories. Where are we, and where are we going? Speaker: Tristan Goodbody - University of British Columbia, Canada

15:30 – 16:00	Coffee Break
16:50 – 17:40	Lecture 7: Advances in forest monitoring by remote sensing Speaker: Luiz Eduardo O. e Cruz de Aragão
18:00 – 19:00	Event closing ceremony
Day 22 - Thursday	
08:00 – 12:00 e 13:00 – 18:00	Short course: LiDAR applied to forest mensuration: data collection, processing and analysis By: André Quintão de Almeida
08:00 – 12:00 e 13:00 – 18:00	Short course: Digital aerial photogrammetry with DRONE – forest applications By: Ricardo Pinheiro Cabral
08:00 – 12:00 e 13:00 – 18:00	Short course: Orbital images qualification QGIS – CIO-QGIS By: Prof. Dr. Alexandre Rosa dos Santos