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Chair

Special Track

STAAS: Advanced Sensors and Actuators for Agriculture and Knowledge in Engineering

Proposal Outline

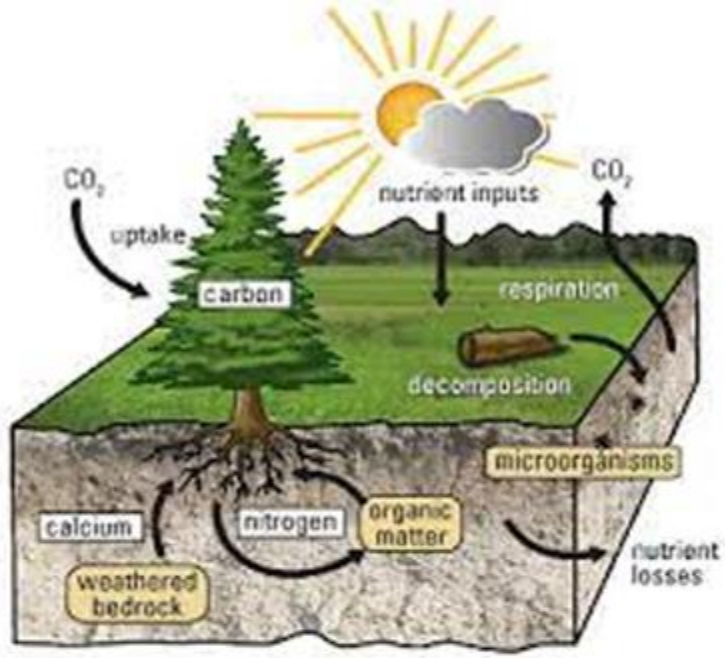
1. Introduction

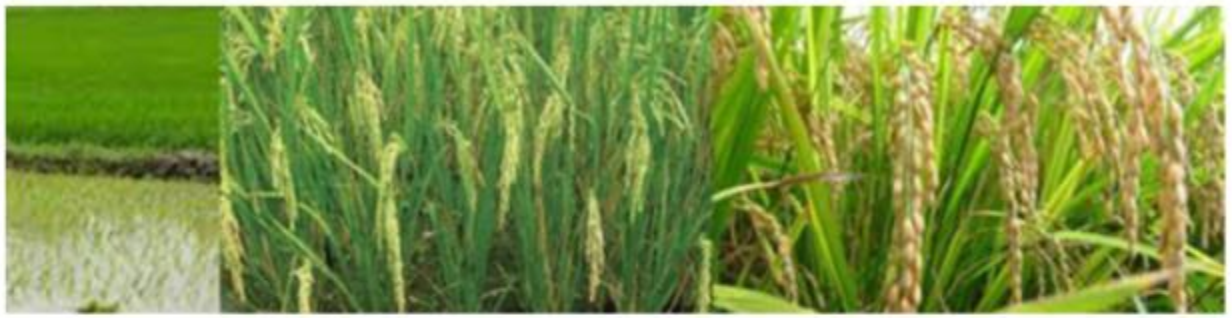
2. Presentations of the accepted Papers

3. Open discussion and closing remarks

STAAS: Advanced Sensors and Actuators for Agriculture and Knowledge in Engineering

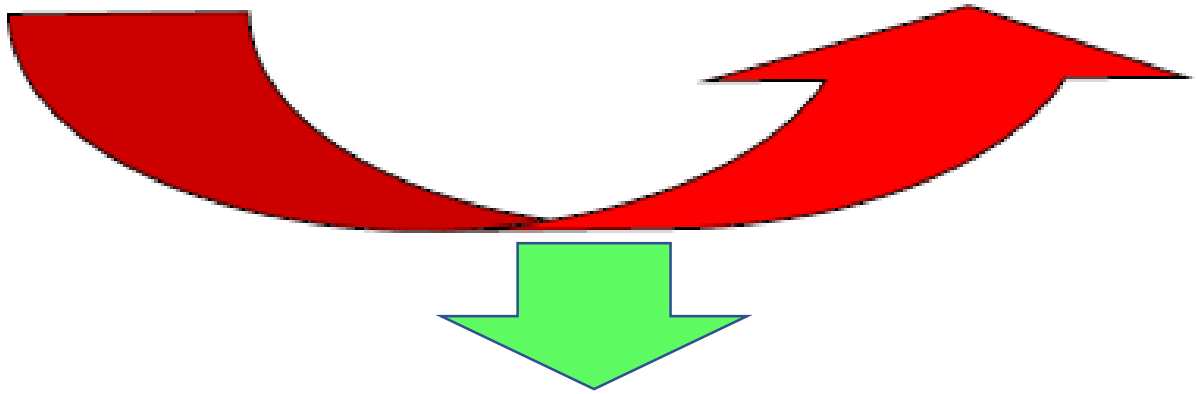
Barcelona
May 2024





- Productivity
- Efficiency
- Breeding of new varieties
- Pest control
- Fertilization

- Effects on the environment
- Biological diversity
- Animal welfare
- Soil degradation
- Food, Fibers and Energy quality



Productivity – Resilience – Storage - Accessibility

Topics of interest and Challenges

- Sensors, signal and image processing
- Actuators in control process
- Innovation in modeling, simulation, and emulation
- Interoperability
- Internet of things
- Big data analysis, architectures and infrastructures
- Computer intelligence for sensors and actuators data analysis
- AI-soft sensors driven applications
- Competence transdisciplinary measurement
- Social business

Fields of interest

- Agriculture
- Business
- Economy
- Engineering
- Humanity
- Manufacturing
- Science
- Silage and grain storage

Session ALLSENSORS/STAAS I (on site)

78001 - Paulo Cruvinel: *Using Light-Band Sensors for Stress Evaluation in Rainfed Maize Agricultural Crop*

78005 - Sérgio da Silva Soares: *Earth-Satellite Monitoring System for Storaged Grains*

Discussion

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Session ALLSENSORS/STAAS II (virtual)

78002 - Alex *Bertolla: Dimensionality Reduction for CCD Sensor-Based Image to Control Fall Armyworm in Agriculture*

78004 - Ladislau Rabello: *Use Affordable Sensors to Investigate Aeration and Resistance to Plant Root Penetration for Soil Assessment*

78006 - Deniver Schutz: *Real-time Detection and Reconfiguration of Sensors in Agricultural Sprayers Subject to Failures*

Open discussion and Closing remarks

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Thank you all for participating in this Special Track!!