

Special Session

Optical Remote Sensing Signal Modeling

Co-located with IEEE ATSIP'2016

21-23 March 2016, Monastir-Tunisia

Scope:

In this decade, new optical sensors with different features allowing more and more access to soil and vegetation cover properties are developed. For instance, multispectral and hyperspectral data allow deriving crop biophysical parameters such GAI, FAPAR, Cab and fCover. In addition, LiDAR waveform allows to estimate tree 3-D structure, particularly LAI profile can be derived.

To benefit from such accurate measurements, effective radiative transfer models (forward and backward) have to be developed. For instance, in forward case, light polarization is a hot topic since it allows to remove the specular reflection in reflectance computation allowing better biophysical property estimation. In backward case, inverse models based on tangent linear model, Monte Carlo simulation, and particular filters can be adopted to solve highly non-linear problems.

The session “**Optical Remote Sensing Signal Modeling**” will be an opportunity to exchange the results of research, new developed techniques in this research field with promising prospects.

The session welcomes papers on the following (but not limited to) research topics:

- Optical radiative transfer modeling
- LiDAR backscattering modeling and inversion
- Multispectral and hyperspectral data inversion and assimilation
- Canopy property inversion using remote sensing data
- New technologies for precision agriculture

Special Session Chairs:

- Dr. Jean-Philippe Gastellu Etchegorry, IUT UPS, CESBIO Laboratory, France
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- Dr. Abdelaziz Kallel, CETIC research center, ATMS Laboratory, Tunisia
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Technical Program Committee Members:

Jean-Philippe Gastellu Etchegorry, Mehrez Zribi, Riadh Abdelfateh, Abdelaziz Kallel, Rima Guidara, Sihem Chaabouni...

Journal Publication:

Extended versions of selected papers for the topic Remote sensing and assimilation will appear in “European Journal of Remote Sensing” (ISI THOMSON Indexed, Impact factor : 1.36) : <http://www.aitjournal.com> .

Important Dates:

Paper submission deadline:	December 31th, 2015
Acceptance Notification:	January 15th, 2016
Camera Ready:	February 1st, 2016
Author’s Registration Deadline :	February 15th, 2016

For any query related to the special session, please contact Dr. Abdelaziz Kallel at abdelaziz.kallel@enetcom.rnu.tn