



RIO18
21st World Congress
of Soil Science

21 WORLD CONGRESS OF SOIL SCIENCE
Sunday 12 – Friday 17 August 2018
Rio de Janeiro, Brazil

Rio de Janeiro August | 12 - 17

DIVISIONAL SYMPOSIUM – DIVISION 1

| Thursday (Aug, 16) | | Room "Oceania VI e VII" | |
|--------------------|---------|--|------------------------|
| WG05 | | Proximal soil sensing (PSS) | |
| | | Convener: Gustavo M. Vasquez, Pesquisador Embrapa Solos, Rio de Janeiro, RJ, Brazil | |
| | | Co-Convener: Zhou Shi, College of Environmental and Resource Sciences, Zhejiang University, China | |
| Schedule | ID | Title | Presenter |
| 15:30 – 15:40 | -- | Opening | Conveners |
| 15:40 – 16:05 | Invited | <i>Applications of electromagnetic induction techniques in soil studies across different spatial and temporal scales</i> | Jingyi Huang |
| 16:00 – 16:25 | Invited | <i>Machine learning and computer vision applications in proximal soil sensing</i> | Asim Biswas |
| 16:25 – 16:40 | 1690 | Development of a low cost MIR spectrometer for proximal soil sensing: progress and challenges | Matthew Keller |
| 16:40 – 16:55 | 2678 | Estimating soil organic carbon with soil Vis-NIR spectroscopy: a comparison of different algorithms in two forest areas | Gabriele Buttafuoco |
| 16:55 – 17:10 | 300 | Monitoring soil moisture dynamics at the plot scale using repeated electromagnetic induction surveys | Jingyi Huang |
| 17:10 – 17:25 | 2667 | Prediction of total silicon concentrations in French soils using pedotransfer functions from mid-infrared spectrum or pedological characteristics | Nicolas PA Saby |
| 17:25 – 17:40 | 2434 | Seeing is believing: managing soil variability, improving crop yield and minimising off-site impacts in sugarcane using proximal soil sensing and digital soil mapping | John Triantafillis |
| 17:40 – 17:55 | 789 | Soil spectra fusion based on Outer Product Analysis (OPA): a strategy for modeling soil properties | Fabrcio da Silva Terra |
| 17:55 – 18:10 | 968 | Soil survey for agricultural land physical quality grade assessment using in-situ vis-NIR spectroscopy in Jiangxi Provicne, China | H Y Li |
| 18:10 – 18:15 | -- | Closing | Conveners |



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