

The 30th Evenari symposium:
Digital agriculture for efficient resources utilization

June 19, 2019

Sede Boqer Campus

GEORGE EVENS FAMILY AUDITORIUM

The Evenari symposium is an annual gathering of plant and agriculture scientists and enthusiasts in honor of the late Prof. Michael Even-Ari at Sede Boqer campus. This year's topic highlights basic and applied research on sensing, imaging and data analysis for optimal resources use in agriculture.

09:20-11:00 Greetings and Innovations in monitoring (Chairperson: Jhonathan Ephrath)

- 09:20-09:40 **Jhonathan Ephrath**, Head, The French Associates Institute for Agriculture and Biotechnology of Drylands, , Ben-Gurion University of the Negev
- Noam Weisbrod**, Director, Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev
- Yitzhak Gutterman**, Ben-Gurion University of the Negev
- 09:40-10:05 **Sabina Haber** Imaging of root zone processes using MRI
- 10:05-10:30 **Andreas Pohlmeier** MRI as a noninvasive method to study solute distribution in soil
- 10:30-11:00 **Jiftah Ben-Asher** Robot, camera of mobile phone and smart farming

11:00-11:20 Coffee break

11:20-13:00 Sensing and data analysis (Chairperson: Yael Edan)

- 11:20-11:40 **Ofer Dahan** New monitoring system for real time continuous measurement of nitrate concentration in unsaturated soils
- 11:40-12:00 **Shabtai Cohen** Tree sap flow measurement, integration and insights
- 12:00-12:20 **Jonathan Rosenblatt** Multivariate Visual Analytics for Data Quality in Precision Agriculture and Livestock Farming
- 12:20-12:40 **Alex Furman** Geophysical monitoring of the root zone
- 12:40-13:00 **Gilad Ravid** Applying machine learning on sensor data for irrigation recommendations

13:00-14:30 Lunch and Posters

14:30-16:10 Imaging in Agriculture (Chairperson: Naftali Lazarovitch)

- 14:30-14:50 **Yael Edan** Robotics in the digital era
- 14:50-15:10 **Yafit Cohen** Development of spatial decision support tools for pest control
- 15:10-15:30 **Ran Lati** 3-D image-driven plant phenotyping models from the lab to the field
- 15:30-15:50 **Rafi Linker** Vision-based estimation of yield in apple orchards: Lessons learned from developing various approaches using datasets with contrasting properties
- 15:50-16:10 **Amir Lasry** Continues phenotyping of root length using CNN

16:10 Closing remarks