

Session: Sensing technologies and Digital Twins

Dec. 14 2022 | Orion room B4030

10.00 – 12.00 Session: Role of sensing in current Digital Twins projects and activities

Chair: **Santiago Gaitan**, OnePlanet R&D Team lead Data Science & Digital Twins

1000-1010: Welcome and introduction (Mentimeter: What are your expectations of the day?)

1010-1050 Plenary talk (30 mins) + Q&A (10 mins)

Stephane Meystre, OnePlanet Scientific Director AI, DataScience

Title: *AI-Enabled Digital Twins Along the Gut-Brain Axis*

1050-1110 **Martijntje Vollebregt**, WUR Researcher, Food Processing

Title: *Sensors and digital twins are essential to reduce food loss and waste*

1110-1130 **Daniel Onwude**, Scientist, Swiss Federal Laboratories for Materials Science and Technology

Title: *Flower to plate: Use of digital twins in the citrus supply chain*

1130-1150 **Bas Boom**, Researcher, OnePlanet, LiDAR sensing and Computer Vision.

Title: *Digital Twin of the Orchard*

12.00 – 13.30 : Lunch

13.30 – 15.30 Session: Sensors as an opportunity for Future Digital Twins.

Chair: **Aneesh Chauhan**, WUR Expertise leader Computer Vision & Agro-Food Robotics

1330-1340 Welcome

1340-1400 **Ilias Tsafars**, WUR Researcher

Title: *Sensing in the Autonomous Greenhouse Challenge*

1400-1420 **Dr.ir. Ali Youssef**, Lecturer and Researcher, Computational Physiology (Adaptation Physiology Group, ADP, WUR)

Title: *Software-Sensors and Animal Digital Twin*

1420-1440 **Aniek Even**, Sr. Researcher, OnePlanet

Title: *Sensing in the gastrointestinal tract: tools to build a gut health digital twin*

1440-1500 **Guido Camps**, WUR/OnePlanet Researcher.

Title: *Sensing what and when people eat*

1500-1520 **Maria Sokolova**, Researcher WUR, Farm technology.

Title: *Towards digitalization of fish stocks: automated bycatch documentation for Dutch bottom trawlers*

1520-1530 Wrap up (Mentimeter: what are the key take aways?)