

# Practical Applications of near-infrared spectroscopy and machine learning in medicine, neuroscience and food sciences



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

Date: 20/10/2022 starting at 10.00 am  
Venue: Best Western Hotel Galileo, Padova



## Program

- 10.00 – 10.15 Welcome address: Prof Bayden Wood and Prof. Silva Benavides Varela
- 10.15 – 10.45 Si-Ware Technological Solutions (Speaker to be announced)
- 10.45 – 11.00 Morning Coffee
- 11.00 – 11.30 Applications of near-infrared spectroscopy in medicine (Prof. Bayden R. Wood)
- 11.30 – 12.00 Applications of near-infrared spectroscopy in neuroscience (Prof. Silvia Benavides-Varela; Prof. Judit Gervain; Prof. Sabrina Brigadoi)
- 12.00 – 13.00 Demonstration of Si-Ware scanner and probe using food as a model. Hands on workshop. (Dr. Grant Webster, Si-Ware)
- 13.00 – 14.30 Lunch
- 14.30 – 15.00 Basics of multivariate data analysis (Prof. Bayden Wood)
- 15.00 – 15.30 Tutorial on the use of Quasar, an open-source platform for machine learning and data analysis <https://quasar.codes/#features> (Dr. Diana Bedolla)
- 15.30 – 16.00 Practical session with Quasar Part 1 (Dr. Diana Bedolla; Prof. Bayden Wood)
- 16.00 – 16.15 Afternoon Coffee
- 16.15 – 16.45 Practical session with Quasar Part 2 (Dr. Diana Bedolla; Prof. Bayden Wood)
- 16.45 – 17.00 Closing remarks and questions

Participation to the workshop is free.

Pre-registration is mandatory. Link for online zoom from Australia will be available.

Organizers:

UniPD: Prof. Silvia Benavides Varela, Prof. Judit Gervain, Prof. Sabrina Brigadoi

Monash University: Prof. Bayden Wood, Dr Diana E. Bedolla.