

## **Non-invasive microvascular monitoring technologies based on diffuse optics**

*Thursday 23 January 2025 10:55 (45 minutes)*

Diffuse optics is a promising tool for the measurement of local tissue hemodynamics, enabling non-invasive quantitative assessment of oxy- and deoxy-hemoglobin concentrations and blood flow of the deep tissue (>1cm) at the microvascular level. In this talk, I will review the main diffuse optical technologies applied to health such as near-infrared diffuse optical spectroscopies and laser-speckle based techniques, with particular focus on intensive care clinical applications.

**Presenter:** CORTESE, Lorenzo (ICFO)