

SEMINARIO / SEMINAR

Titolo / Title:

Mapping brain oxygen metabolism with MRI

Quando / When:

23 Maggio 2023, ore 11:00 / 23rd May 2023 at 11:00 CET

Dove / Where: Aula Volta, ITAB

Relatore / Speaker:

Dr Mike Germuska PhD, Senior Lecturer, Department of Physics and Astronomy and Cardiff University Brain Research Imaging Centre, Cardiff University. UK

Abstract:

A number of different methods have emerged in recent years for measuring the brain's consumption of oxygen using magnetic resonance imaging (MRI). These hold promise as markers of tissue function and dysfunction in neurological and psychiatric disease. Some techniques offer global (whole brain) measurements while others are capable of mapping the rate of cerebral oxygen metabolism (CMRO₂). I will discuss our recent advances in mapping CMRO₂, focusing on calibrated fMRI approaches, including the MRI and data analysis methods that we have used to probe brain tissue physiology in health and disease.

