

Bollettino Settimanale

Lunedì 24 luglio 2017	Martedì 25 luglio 2017	Mercoledì 26 luglio 2017	Giovedì 27 luglio 2017	Venerdì 28 luglio 2017
			<p>AULA RASETTI ORE 930 INFN-Fisica sperimentale delle particelle elementari</p> <p>Methodological considerations on neuroimaging-derived biomarkers</p> <p><i>Andrea Chincarini (GE)</i></p> <p>With the increasing availability of large quantities of clinical data a new science is born, one which tackles and looks for complex relationships in data and translate them into robust indexes with relevant information. This approach allowed researchers to address complex neurodegeneration pathologies like the Alzheimer's Disease (AD), whose etiology has eluded us for more than a century. The pathophysiologic process leading to neurodegeneration in (AD) is thought to begin long before clinical symptoms develop. An increasing effort has been devoted to improving in-vivo neuroimaging techniques. Yet these techniques do not provide a direct biomarker. Rather, the clinically relevant information is a derived quantity, embedded in form of patterns and relationships, and often complemented by heterogeneous inputs. We shall review some methodological key points in analysing neuroimaging data, focusing on three paradigmatic cases: longitudinal studies (structural MRI), coherence networks (multi-modal) and amyloid-PET semi-quantification approaches.</p>	