1.

Record Nr.	UNINA990002868800403321
Autore	Gatto, Letterio
Titolo	Computing graps sequences at gorenstein singularities / Letterio Gatto
Pubbl/distr/stampa	Torino : Politecnico di Torino, 1994
Descrizione fisica	1v. ; 31 cm
Collana	Rapporto interno / Dipartimento di matematica, Politecnico di Torino ; 11/1994
Disciplina	515
Locazione	MAS
Collocazione	MXXXII-C-29
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Paginazione varia

2. Record Nr. UNINA9910220058503321

Autore	Tyler Christopher W
Titolo	Neural Signal Estimation in the Human Brain
Pubbl/distr/stampa	Frontiers Media SA, 2016
Descrizione fisica	1 online resource (142 p.)
Collana	Frontiers Research Topics
Soggetti	Neurosciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Sommario/riassunto

The ultimate goal of functional brain imaging is to provide optimal estimates of the neural signals flowing through the long-range and local pathways mediating all behavioral performance and conscious experience. In functional MRI (Magnetic Resonance Imaging), despite its impressive spatial resolution, this goal has been somewhat undermined by the fact that the fMRI response is essentially a blood-oxygenation level dependent (BOLD) signal that only indirectly reflects the nearby neural activity. The vast majority of fMRI studies restrict themselves to describing the details of these BOLD signals and deriving non-quantitative inferences about their implications for the underlying neural activity. This Frontiers Research Topic welcomed empirical and theoretical contributions that focus on the explicit relationship of non-invasive brain imaging signals to the causative neural activity. The articles presented within this resulting eBook aim to both highlight the importance and improve the non-invasive estimation of neural signals in the human brain. To achieve this aim, the following issues are targeted: (1) The spatial limitations of source localization when using MEG/EEG. (2) The coupling of the BOLD signal to neural activity. Articles discuss how animal studies are fundamental in increasing our understanding of BOLD fMRI signals, analyze how non-neuronal cell types may contribute to the modulation of cerebral blood flow, and use modeling to improve our understanding of how local field potentials are linked to the BOLD signal. (3) The contribution of excitatory and

inhibitory neuronal activity to the BOLD signal. (4) Assessment of neural connectivity through the use of resting state data, computational modeling and functional Diffusion Tensor Imaging (fDTI) approaches.