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PHENOMENOLOGICAL ARCHITECTURE OF A MIND AND OPERATIONAL ARCHITECTONICS OF THE BRAIN: THE UNIFIED METASTABLE CONTINUUM

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ARCHITECTONICS OF THE BRAIN: THE UNIFIED METASTABLE PHENOMENOLOGICAL ARCHITECTURE OF A MIND AND OPERATIONAL CONTINUUM

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algorithms, artificial machine consciousness, and diagnosis of dynamic brain diseases will be discussed briefly. organization, and what mediates between them. Implications for linguistic semantics, self-organized distributed computing In our contribution we will observe phenomenal architecture of a mind and operational architectonics of the brain and will show their intimate connectedness within a single integrated metastable continuum. The notion of operation of different complexity is the identify what at the same time belongs to the phenomenal conscious level and to the neurophysiological level of brain activity fundamental and central one in bridging the gap between brain and mind: it is precisely by means of this notion that it is possible to

Keywords: EEG, brain operation; functional isomorphism; dynamical neuroscience; consciousness

Cited by :

date: 1-Mar-2013. [CrossRef] architectonics of brain organization: Criticality and self-organization considerations. Chaos, Solitons & Fractals. Online publication Andrew A. Fingelkurts, Alexander A. Fingelkurts, Carlos F.H. Neves. (2013) Consciousness as a phenomenon in the operational

Andrew A. Fingelkurts, Alexander A. Fingelkurts. (2013) Dissipative many-body model and a nested operational architectonics of the brain. Physics of Life Reviews 10:1, 103-105. Online publication date: 1-Mar-2013. [CrossRef]

Reviews 9:1, 49-50. Online publication date: 1-Mar-2012. [CrossRef] Andrew A. Fingelkurts, Alexander A. Fingelkurts. (2012) Mind as a nested operational architectonics of the brain. Physics of Life

Andrew A. Fingelkurts, Alexander A. Fingelkurts. (2011) Persistent operational synchrony within brain default-mode network and operational architectonics model guided approach. Brain Research 1428, 80-92. Online publication date: 1-Jan-2012. [CrossRef] Andrew A. Fingelkurts, Alexander A. Fingelkurts, Carlos F.H. Neves. (2012) "Machine" consciousness and "artificial" thought: An

frequency domain of operational synchrony. Neuroscience Research 68:3, 207-224. Online publication date: 1-Nov-2010. [self-processing operations in healthy subjects. Brain and Cognition 75:2, 79-90. Online publication date: 1-Mar-2011. [CrossRef] Alexander A. Fingelkurts, Andrew A. Fingelkurts. (2010) Topographic mapping of rapid transitions in EEG multiple frequencies: EEG

Online publication date: 1-Nov-2010. [CrossRef] Giampaolo Sasso. (2010) Dynamic sensory-motor oscillation and cerebral development. Cognitive Processing 11:4, 307-329

Online publication date: 1-Nov-2009. [CrossRef] Alexander A. Fingelkurts, Andrew A. Fingelkurts. (2009) Is our brain hardwired to produce God, or is our brain hardwired to perceive God? A systematic review on the role of the brain in mediating religious experience. Cognitive Processing 10:4, 293-326.