

# WORKSHOP (I)

Musical Diagram,  
Motive,  
social resonance  
and music-enriched  
cognitive  
enhancement

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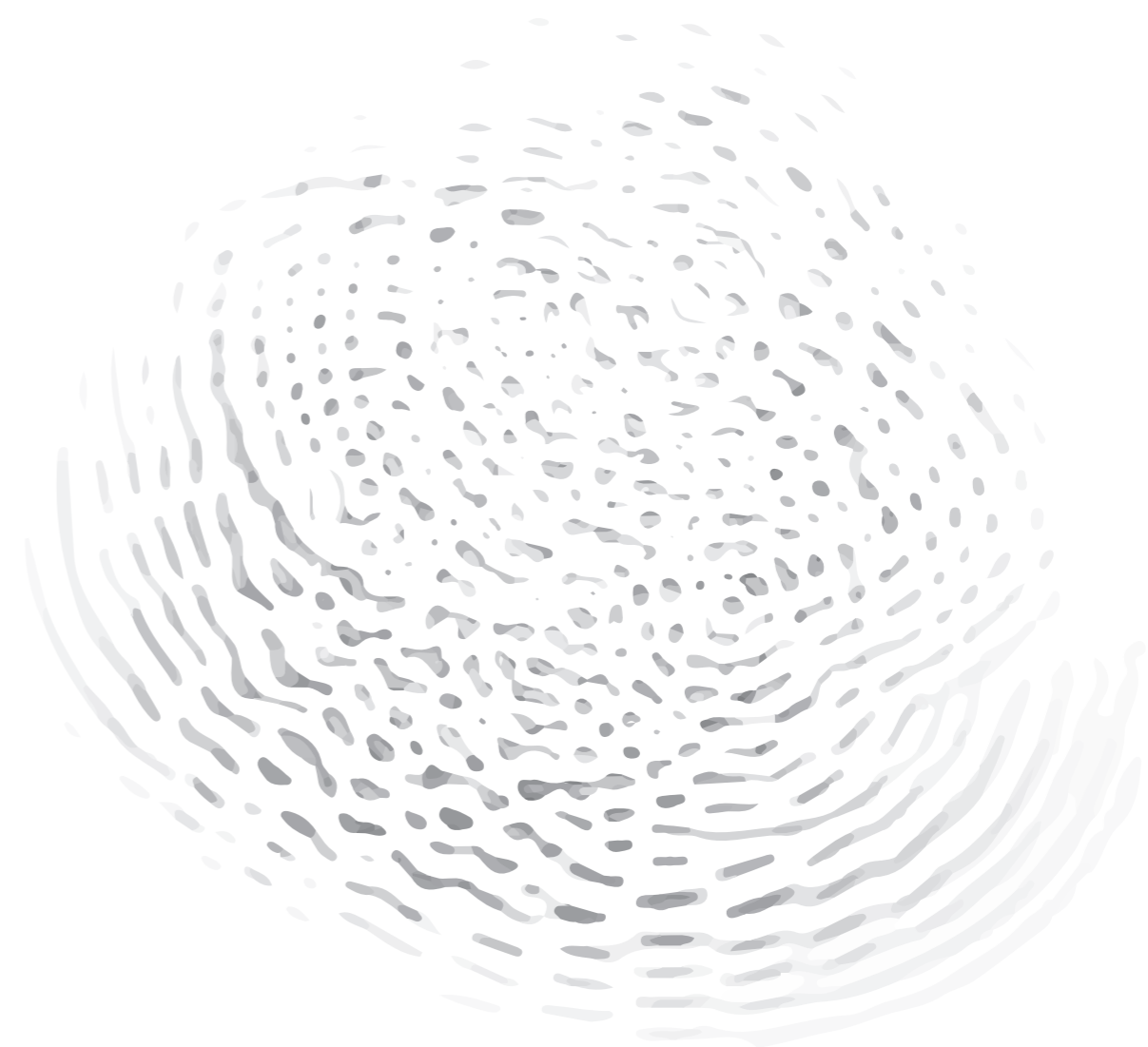
26 March 2019  
FCUL  
Venue: Room 4.2.07  
10h - 13h

**Workshop Series**  
Philosophy, Science  
and Human Technology  
of Music,  
Sound,  
Noise,  
Resonance

**Org.**  
Alexander Gerner  
Vinicius Jonas  
PhilHumTech, CFCUL

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Free admission  
We ask to send us an email  
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# PHILOSOPHY, SCIENCE AND HUMAN TECHNOLOGY OF MUSIC, SOUND, NOISE, RESONANCE

Workshop Series  
organized by Alexander Gerner  
and Vinicius Jonas  
(PhilHumTech; CFCUL)

Music, Sound, and Listening have always been sources of powerful theoretical insights and give rise to a rich history of artistic, technical and social human praxis. Several notions and scientific concepts are derived from musical/sonic/acoustic as well dynamic phenomena and practices that proliferate in various modes of thinking and making sense of or even changing the existing world. Besides the relation of acoustics and phenomenology of listening or music and mathematics as well the debate on informational noise and resonance, Epistemologies of aesthetics and aesthetic practices can be contrasted and applied with scientific concepts such as entropy, synchrony, entrainment among others. From artistic practices and theories to physics and biology, from metaphysics to mathematics, from phenomenology to social sciences, one can identify a manifold of musical/sonic diagonally related concepts and metaphors being employed, such as noise, resonance, synchronicity, improvisation/composition, consonance/dissonance, syncope, theme.

Music-related practices can function as a rich laboratory to investigate topics such as interaction and participation (human-human, human-machine, machine-machine), subjectivation/socialization, embodied techniques and technologies, non-conceptual forms of communication and political action, as well as thinking with sounds, schemas, diagrams and musical or sonic themata. Broadening these approaches to resonances, syncopes and interferences in anthropotechnical and social theory spheres we aim to clarify further how the fascination with aesthetic, acoustic and electromagnetic concepts- such as wave, resonance, interference- can be made productive in interdisciplinary praxis fields such as (performative) arts, the humanities, social

sciences and praxis in society in order to renew the techno- human condition from a sonic point of view. This may as well include noise and information accounts, negentropy or embodied sense of listening dependent on body postures and gestures, the fitting of awareness of tones, sounds and sound combinations in the physical attitude, sonic ecologies of a precognitive ground of experience, and Epistemologies of Noise, in which “noise” may even provide for unpredictability inherent in information that innovates the state of given knowledge.

The workshop series is part of the research line PHILOSOPHY OF HUMAN TECHNOLOGY (PHILHUMTECH) which develops studies in philosophy of technology that account for (a) how recent, emergent and convergent technologies constitute, magnify, amplify human experiences or put autonomy, personhood, freedom, privacy and human life at risk and describe its techno-anthropologic, philosophical, ethical, policy consequences. How should policy and the public be advised in questions of technology, if technologies and techniques redefine the proper constitutive layers of being human and its proper (inter-) actions, development and the future of humanity (b) How do instruments, tools, devices and apparatuses as well as systems and techniques and bodily senses in their inventive poetic actions and kinetic movements (e.g. gesture and diagrams) and aesthetic qualities produce and transform human knowledge, experience and social life. (c) develops further case studies in a philosophy of human enhancement.

As its main goal this workshops series aims to promote presentations and discussions, hands on hackathons and dialogues centered on music/sonic-related theories, concepts, technologies, and practices being put to use as instruments to do research on contemporary philosophical, human technological, scientific and artistic issues.

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26.3.2019

FCUL, Room  
4.2.07  
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## MUSICAL DIAGRAM, MOTIVE, SOCIAL RESONANCE AND MUSIC-ENRICHED COGNITIVE ENHANCEMENT

### Viviana Diaz (Universidad Nacional de Colombia)

An approach to the inverse relation  
between music and math throughout the  
idea of motives

Summary: I attempt to exhibit the idea of musical motives developed by composers such as Bach and Schoenberg, and mathematical motives that come from contemporary mathematics expressed by Grothendieck. Then conclude that music and mathematics intent to find an aesthetic equilibrium sharing creation techniques and use similar meanings of “logic” and “coherence” throughout relations and interconnections of “simple” and “clean” ideas (motives).

### Vinicius Jonas (CFCUL)

Motif as acoustic non-symbolic diagram: the  
case of musical composition

Summary: In this presentation, I employ the perspective of compositional practices as a point of view to mobilize a conception of acoustic non-symbolic diagram. In the context of the current debate on C. S. Peirce's philosophy of diagrams, I argue that in certain techniques for composing music one can identify relational icons or skeleton-like signs that do belong to the semiotic category of diagrams but nonetheless push the scope of that concept beyond logical-mathematical functions as well as beyond the visual modality – as Peirce himself

already hinted. Such is the case in several compositional techniques involving motivic or thematic variation, in which acoustic schemas (motif, theme, refrain) introduce possibilities of development and transformation outside all sorts of symbolic conventions, therefore functioning as poietic icons.

### Alexander Gerner (CFCUL)

Social Resonance\_/\_Music enriched  
attention enhancement in children

Summary: Probing a non-reductionist Philosophy of Cognitive Enhancement, this talk amplifies the Aristotelian common sense concept κοινή αἴσθησις by analysing the concept and metaphor of “resonance” as acoustic sense of thought derived for example from social music phenomenology (Schütz) and philosophical anthropology as Plessner's notion of music sense – similar to his concept of Sense of Face. Syncopically, this talk will hinge on music-enriched cognitive (attention) enhancements, especially in children.