

UNIVERSITY OF HOUSTON

The Brain Center and IEEE EMBS Workshop

The Brain on Music: Music, Improvisation and Technology for Health and Well-being



Lauren Hayes, PhD, Professor
School of Arts, Media and Engineering
Arizona State University

RSVP for free online:
<https://lauren-hayes-workshop.eventbrite.com>

Hands-on workshop:
May 7-9. 8:00 am to 7:00 pm.
Room 185, Moores School of Music

Demonstration: “Practices surrounding improvisation using new technologies”.
May 9. 12:00 pm.
Room 185, Moores School of Music

LECTURE ABSTRACT

Music, Improvisation and Technology for Health and Well-being is a transdisciplinary art-science-engineering engagement project that will work with a diverse group of professional and students to develop a series of art-science performances of new improvised creative works that are informed by noninvasive ‘artist-in-the-loop’ interfaces with the brain and the body. These performances will be scaffolded by a series of workshops developed to explore the role of the creative arts and improvisation on health and well-being.

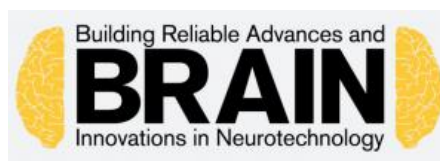
The first workshop will **explore the impact of musical improvisation, expressive movement, and mobile brain-body imaging (MoBI) technology, as an art-science practice on health and social/emotional well-being.**

SPEAKER BIOSKETCH

Lauren Hayes is Assistant Professor of Sound Studies within the School of Arts, Media and Engineering at Arizona State University. She is a musician and sound artist with a decade of experience building and performing with hybrid analogue/digital instruments. Her research explores new strategies for live electronic music performance by investigating the performer's physical relationship with the digital realm through the lens of enactive and embodied music cognition, and performing with haptic and tangible interfaces. She also composes haptic music that can be experienced as vibration throughout the body and leads PARIESA (Practice and Research in Enactive Sonic Art) at ASU.

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WORKSHOP

The Brain on Music: Music, Improvisation and Technology for Health and Well-being

**With Lauren Hayes
Musician and Sound Artist
Arizona State University**

Workshop Schedule

Monday 7th

08:00am : Working Breakfast at Room 185, Moores School of Music; Introductions;

09:30am : Aesthetic, creative and technical goals of the workshop (Hayes, Contreras-Vidal)

11:00am: Technology to Connect to the Brain and the Body; technical demonstrations

Noon: Working lunch: Brainstorming session

13:00pm: "Practices surrounding improvisation using new technologies" (Lauren Hayes)

14:00pm: Hands-on work: Students from the Colleges of Art, Engineering, Technology and Liberal Arts will work with Lauren Hayes and the Brain-Machine Interface Lab at UH to create a performance demonstration at the nexus of art, science and engineering.

6pm: Adjourn

7pm: Dinner with students and faculty

Tuesday 8th

08:00am: Working Breakfast at Room 185, Moores School of Music; Review of last day activities, and review of activities for today

09:00am: Discussion of performance demonstration, collaboration with Teresa Chapman (UH Dance teacher and performer), Woody Witt (sax improvisation, UH adjunct professor of music); team assignments

10:00am: "Practices surrounding improvisation using new technologies II" (Lauren Hayes)

11:00 am: Continue hands-on art-science hackathon

Noon: Working lunch: “Discussion of Neurotechnologies to Help the Body Move, Heal, and Feel Again” (Hayes, Contreras-Vidal)

14:00pm: Hands–on work: Students from the Colleges of Art, Engineering, Technology and Liberal Arts will work with Lauren Hayes and the Brain-Machine Interface Lab at UH to create a performance demonstration at the nexus of art, science and engineering

7pm: Dinner with students and faculty

Wednesday 9th (PERFORMANCE IS TODAY)

08:00am: Working Breakfast at Room 185, Moores School of Music; Review of last day activities, and review of activities for today

10:00am: Hands–on work: Students from the Colleges of Art, Engineering, Technology and Liberal Arts will work with Lauren Hayes and the Brain-Machine Interface Lab at UH to create a performance demonstration at the nexus of art, science and engineering

Noon: Performance Demonstration followed by Q&A; media invited

2pm: Working lunch: “Discussion of performance with students and the artist” (Hayes)

3:30pm: Future steps, grant writing, paper for Leonardo or other outlet?

5:pm: Depart for Airport

7pm: Depart from IAH to Phoenix