

OCTOBER 21, 2020 | 6:00PM | ONLINE PRESENTATION
HOSTED BY VIJAY KONKIMALLA & ALVIN CHIN



TOPIC: Software Musical Instrument Design
Machine Learning & Machine Listening

SPEAKER: Sam Pluta
Assistant Professor of Music
University of Chicago

WHEN: October 21, 2020 – 6:00PM

WHERE: Zoom Online Presentation
[RSVP](#) or call **312.861.1100**



Sam Pluta is a composer and electronics performer whose work explores the intersections between instrumental forces, reactive computerized sound worlds, traditionally notated scores, and improvisation. He has also received commissions and written music for groups like *Yarn/Wire*, *Ensemble Dal Niente*, and the *New York Philharmonic*.

Laptop improvisation is a core part of Pluta's artistic practice. Sam appears as a composer and performer on over thirty albums of new music and jazz.

Pr. Pluta is currently Assistant Professor of Music at the University of Chicago, where he teaches composition and directs the CHIME Studio.

Music in the Silences

Much of Pluta's recent work has involved exploring Machine Learning and Machine Listening techniques to create highly expressive software instruments for musical performance.

Pr. Pluta outlines two instruments from his recent efforts: a Silent-Brass and trombone-based instrument that analyses the signal of an acoustic trombone and controls digital synthesis using data captured from the trombone analysis and a multi-mapped neural network-based instrument, which maps small dimensional controller spaces to large dimensional sonic spaces.

Pr. Pluta will share his code and the design features of these instruments. Additionally, he will play music made with these instruments, including his 2017 composition *Matrix (for George Lewis)* and also a solo live performance.

Join Us to Explore New Sonic Landscapes

In this talk, Pr. Pluta will bring to life new sound architectures made possible by the intersection of human and artificial intelligences, and show us how the music is made behind the scenes.

ABOUT UNIVERSITY OF CHICAGO CHIME

[University of Chicago's CHIME Studio \(Chicago Integrated Media Experimental Studio\)](#) is a vital creative space in the Music Department at the University of Chicago. Directed by composer, improviser, and sound artist Sam Pluta, the studio is focused on creativity in the many realms of electronic music and its integration with other media.

Listen to Sam's music and learn more: [Sam Pluta Invents His Own Type of Music](#), [Sam Pluta's personal website](#), [Spektral Quartet](#).

Positioned at the heart of a world-renowned academic institution, the Department of Music offers graduate degrees in Composition, Ethnomusicology, and Music History and Theory, as well as an undergraduate Bachelor of Arts degree in Music and a lively performance program that involves undergraduate, graduate, and post-doctoral students.

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