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**AES** Audio Engineering Society - Pacific Northwest Section

*Around the Puget Sound, Seattle, Washington, U.S.A.*

# **The Physics of Microphones, How They Work and How To Apply Them Zoom Meeting Wednesday, October 12th, 2022, 6PM PDT (UTC -7)**

Our October meeting concerns a subject that all of us deal with at one time or another: The selection, placement, mounting, and mixing of microphones. Whether for a studio session, live event, broadcast, or location recording; we are challenged with bringing excellent and clear sound to our projects and facilities.

Perhaps we take for granted the physics of how a microphone actually functions. Which type will give me the result I want? How do I best isolate a single instrument in a concert setting? How do I accentuate incident and suppress reflective sound? How about stepping up the audio in a Live-Stream production? Nothing affects the psycho-acoustical perceived quality of a recording, video, film, or live event more than accurate and well-defined sound. And nothing affects that perceived quality and value more than effective microphone selection and placement.



With over 50 years in the audio industry (twenty-one of them working for Audio-Technica U.S., Inc. a well-known manufacturer of microphones, headphones, and other transducers), Mr. Savanyu has a penchant for clear and precise explanation of the most esoteric and technical aspects of transducer physics and technology. His experience as an adjunct Professor of "Audio for Video" at Kent State University gives him insight in understanding the learning experience and student needs.

This event is useful not only for aspiring novices to recording, live sound and broadcast, but also for seasoned audio professionals; as there is always something new to learn with new technology and products. We hope to see you there.

## **Our Presenter**

Steve M. Savanyu is a working production engineer with over fifty years experience in the audio/video industry. Known for his distinctive rocker style, he currently operates Buford T.

Hedgehog Productions, an Ohio based multimedia company. Steve brings a wealth of creative and technical knowledge along with experience-driven skills to produce high-quality audio and video projects ranging from musical sessions, concerts, location video and live-streamed events. Steve also has years of experience working in the audio industry as a director at Audio-Technica U.S. Inc, manager at Dukane Corporation and international systems design engineer for Kidde Automated Systems.

As a professional audio and video engineer/producer, he has been involved with major productions including U.S. presidential debates, inaugurations, festivals, sporting events, Papal visits, trade shows and conferences. An accomplished location recordist, Steve specializes in orchestral, big-band, jazz, and chamber music projects. Along with audio recording, Steve is well-versed in live sound production, video acquisition and audio/video post-production. Recently he entered the world of event live-streaming and has written articles on "stepping up the stream" to improve production quality.

Being in a technology driven industry, Steve keeps abreast of current technological trends, products and techniques that can enhance a production or project. He writes articles and reviews audio products for a major technology publication and has been featured in Crain's Cleveland for Business along with interviews by NAMM and other industry organizations. Additionally, he is a college level instructor (audio and video production) and accomplished public speaker/presenter.

Steve has taught his "The Physics of Microphones" workshop at recording and broadcast schools and at AES (Audio Engineering Society), SBE (Society of Broadcast Engineers) and I.A.T.S.E. (International Alliance of Theatrical Stage Employees) local chapter events.

As a hands-on engineer, Steve is always ready to tackle new and different projects from putting wireless microphones on a jet engine test rig, to synchronizing hot air balloons to glow in time with a musical soundtrack.

## RSVP

**THIS EVENT IS FREE, OPEN TO ALL, AND AES MEMBERSHIP IS NOT REQUIRED**

## Dan Mortensen

*AES PNW 2022-2023 Section Chair*

**n.b.** *The material presented at our meetings is the opinion of the presenter and not necessarily that of the Society. You are encouraged to conduct your own research and to form your own opinions before adopting the presented material as Truth.*