

ASSOCIATION  
FOR RECORDED  
SOUND  
COLLECTIONS



# ARSC New York Chapter

## APRIL 2019 Meeting

7:00 P. M. Thursday, 4/18/19

→At the CUNY Sonic Arts Center←

West 140<sup>th</sup> Street & Convent Avenue, New York

Or enter at 138th Street off Convent Avenue (N.B. not always open)

Shepard Hall (the Gothic building) – Recital Hall (Room 95, ground floor)

An elevator is located in the center of the building

### “RIAA Equalization for Velocity-Sensitive and Displacement-Sensitive Phono Cartridges”

With

**GARY A. GALO**

The RIAA recording and playback curves are quite familiar to audio engineers, record collectors, and audiophiles. The recording curve shows a bass cut and a high-frequency boost. The playback curve provides a complementary frequency characteristic, resulting in a flat response. Most people think of the recording curve as a representation of recorded amplitude, sometimes called “displacement,” but it’s not. The vinyl record is cut with a hybrid of constant-displacement and constant-velocity recording characteristics. This presentation will examine both types of cutting, the frequency response of the record itself, and the response produced by playing the record with a magnetic cartridge, which is velocity-sensitive.

Some manufacturers of displacement-sensitive phono cartridges, specifically LED and strain gauge types, claim that their cartridges don’t require any RIAA playback equalization, while at least one other takes the opposite view. The second half of this presentation will focus on the playback responses of displacement-sensitive cartridges, and the theoretical and practical requirements for playback equalization. A possible explanation for the equalization claims made for strain-gauge cartridges will also be offered, and a few myths will be debunked along the way, including the bizarre view, held in some circles, that phono playback equalization destroys phase. The concepts discussed in the presentation also apply to vintage, pre-RIAA recording curves, and the presentation will be accompanied by an extensive PowerPoint slide show.

**Gary A. Galo** retired in 2014 after 38 years as Audio Engineer at The Crane School of Music, SUNY at Potsdam, NY, where he also taught courses in audio technology and music literature. He now works as a volunteer in the Crane Recording Archive doing preservation, restoration, and digital transfer of vintage Crane recordings. He is also a Crane alumnus, having received a BM in Music Education in 1973 and an MA in Music History and Literature in 1974. Gary is a widely published author with more than 300 articles and reviews on both musical and technical subjects, in over a dozen publications. He has been an active member of the Association for Recorded Sound Collections since 1989, and a frequent recording and book reviewer for the *ARSC Journal*. He has given numerous presentations at ARSC annual conferences, many of which have been published in the *ARSC Journal*, and has been a regular presenter at ARSC New York Chapter meetings. He was the Sound Recording Review Editor of the *ARSC Journal* from 1995-2012, and co-chair (with Seth Winner) of the ARSC Technical Committee from 1996-2014. He has written for *audioXpress* magazine and its predecessors since the early 1980s. He has also published numerous book reviews in *Notes: Quarterly Journal of the Music Library Association*, has written for the Newsletter of the *Wilhelm Furtwängler Society of America*, *Toccata: Journal of the Leopold Stokowski Society*, and he is the author of the "Loudspeaker" entry in *The Encyclopedia of Recorded Sound*. He has also written several articles for *Linear Audio*. He is a member of the Audio Engineering Society, the Boston Audio Society, and the Société Wilhelm Furtwängler.

**Our next meeting will be on May 16, 2019**

**"The Golden Age of Latin Music"  
Presented by Gilda Miros**

**DIRECTIONS TO THE SONIC ARTS CENTER**

**Subway:** Take the 1 train to 137<sup>th</sup> Street City College and walk north to 140<sup>th</sup> St. & Broadway, then go east to 140<sup>th</sup> St. & Convent Avenue. Take the A, B, C, or D trains to 145<sup>th</sup> St, go west on 145<sup>th</sup> St. to Convent Avenue, then south on Convent Ave. to 140<sup>th</sup> St. **Bus:** M4 and M5 on Broadway; M 100, 101 on Amsterdam Ave. (one block West of Convent Avenue)



*The Sonic Arts Center at CCNY offers 4-year Bachelor of Fine Arts degrees in Music with a concentration in Music and Audio Technology. Their program provides an in-depth curriculum emphasizing real-world skills with a project-based approach. Students enjoy a well-rounded program, with emphasis on audio technology, music theory, orchestration, and history to help them compete in a field that today demands an ever-growing and highly diverse skill set.*

All ARSC NY Chapter meetings are free and open to the public.

**Voluntary contributions to help defray our expenses are welcome and tax deductible!**

To join ARSC, visit <http://www.arsc-audio.org>