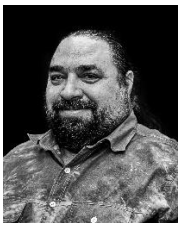
Res-Core by Resonado Labs – High-Performance Racetrack Driver Architecture

Racetrack speaker drivers, also known as oval or elliptical drivers, are becoming more prevalent every day as audio product design continues to evolve. Resonado Labs engineered a proprietary motor optimized for the racetrack driver form factor with a planar voice coil and bobbin assembly situated between parallel magnets. The technology, known as Flat Core Speaker (FCS) technology, will debut this fall under the brand name Res-Core. The bobbin runs along the length of a flat diaphragm, leading to even force distribution, and therefore pistonic movement, while utilizing a thin profile with a flat diaphragm. COMSOL simulations and Klippel measurement data support these claims and show evidence of this technology having comparable performance to conventional drivers in a slimmer profile and heavily outperforming conventional racetrack drivers.

This talk will take a deep-dive into the company's flagship technology, Res-Core, and unveil recent structural innovations.



Benny Danovi is Principal Transducer Engineer at Resonado Labs where he spearheads the expansion of the company's proprietary Res-Core transducer architecture. A highly experienced acoustic transducer engineer with nearly four decades in the industry, Danovi held previous roles at Sonos, Pioneer and Harman, where he designed over 100 automotive OEM drivers under brands such as Bowers & Wilkins, Harman Kardon, JBL, Mark Levinson, and Revel, many with unique motor and suspension topologies. Danovi also previously led OEM automotive transducer design at Alpine and worked on collaborations with brands such as McIntosh and Sonus Faber.

Paul Vedier received his Bachelor of Science in Acoustics at Columbia College Chicago and earned his Masters in Acoustics from the University of Salford U.K., where he specialized in transducer design, digital signal processing, and psychoacoustics. Paul is now based out of Resonado Labs' headquarters in Chicago, Illinois. As Lead Transducer Engineer at Resonado Labs, Paul leads a number of the transducer designs for commercial transducer platforms through electromagnetic, mechanical, and acoustic simulation. Paul is also at the forefront of further transducer innovation within the Resonado Labs research and development team.