

## **ELECTRONICS AND ULTRASOUND RESEARCH: A PERFECT COUPLE**

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In this talk, the experience made at the University of Florence in combining ultrasound research with electronics skill will be reviewed. Custom systems in which the emphasis is on the low noise of the input amplifier (so that the ultrasound echoes from individual microbubbles of few microns diameter are clearly detected), or in the computational power (so that key functionalities such as Doppler spectral analysis can be extended to several hundred sample volumes, or the elastic tissue properties can be estimated, in real time) will be reported as examples. Side benefits such as favoring the approach of young enthusiast electronics students to the world of ultrasound research will also be discussed.