How does one get around to creating audio as immersive an experience as 3D video? According to University of Southampton, UK, team the answer involves a ball of speakers creating "super-surround-sound system."



Looking like a spherical cage, the system contains 40 loud speakers set at different positions and allows one to "sculpt" a sonic landscape through the positioning of virtual sound sources within the space.

"This type of system can be considered to be analogous to a video hologram," Team leader Filippo Fazi tells New Scientist. "If we can reproduce all the sound that goes through the surface of the sphere we can accurately reproduce what's inside."

One demo of the system involves a concert recording, with different instruments virtually repositioned at different elevations, angles and distances from the centre of the cage.

The next step for the team is scaling down the system for commercial applications-- with perceptual tricks allowing the reduction of the amount of speakers while providing the same sound quality as the 40-speaker array.

Go Giant Ball of Speakers Produces 3D Surround Sound (New Scientist)