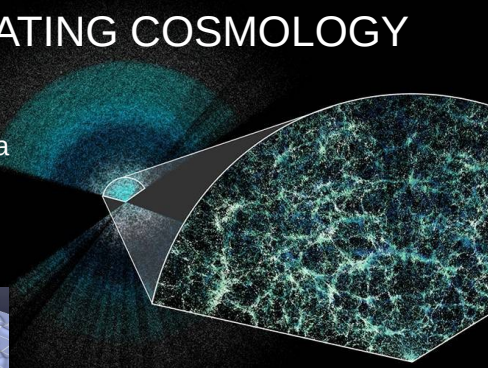
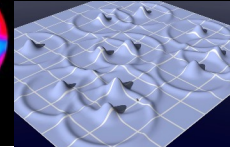
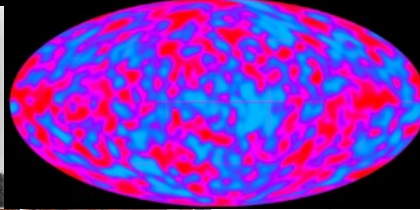
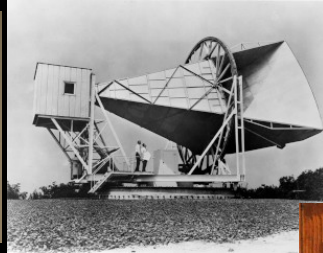


LISTENING TO THE OLDEST LIGHT: A SOUND INTERFACE FOR COMMUNICATING COSMOLOGY

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Modern cosmology relies heavily on our understanding of the Cosmic Microwave Background Radiation (CMBR). Historically, the epochal discovery by Penzias and Wilson began with literally “listening” to the noise detected by their horn antenna. Here we will present a collection of sound sculptures, with the one recently installed in the School Pavilion of the Astronomical Observatory in Belgrade. The work is inspired by the original horn antenna used in the discovery of the CMBR. These sculptures function as interfaces that receives electromagnetic signals from the sky (background microwave radiation) and converts them into the audible domain. The sound waves produced by the sculpture represent an analogy to the first sound waves in the Universe - baryon acoustic oscillations (BAO) - which propagated through the primordial baryon-photon plasma and whose imprint can still be observed across cosmic scales in the filamentary structure of the large-scale distribution of matter. Today, as current tensions in cosmology test the limits of the standard cosmological model, the question of distinguishing signal from noise becomes increasingly important. Noise is not merely a problem of uncertainty, but also an epistemological challenge that confronts the limits of our knowledge. The project explores new ways of communicating cosmology and its methods of inquiry, showing how knowledge can emerge from noise and making abstract phenomena such as primordial fluctuations accessible through direct sensory experience.

