SEEING VOICES

Listening to Historic Sound Recordings with Light

February 10, 2015 5:30 p.m. in 105 Stanley Hall, UC Berkeley

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Presented by:

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This public lecture is presented as a part of Connecting the Dots 2015, an interdisciplinary workshop on pattern recognition.

Sound was first recorded and reproduced by Thomas Edison in 1877. Until about 1950 most recordings were made on mechanical media such as wax, foil, shellac, and lacquer. Some of these older

BERKELEY EXPERIMENTAL PARTICLE PHYSICS

Persons who wish to request disability-related accommodations including sign-language interpreters, should call (510) 643-6456 or TDD at 642-6376. Please request your accommodations as early as possible to assure the best possible arrangements. Official University poster 02/11/14 recordings contain material of great historical interest and are considered too delicate or difficult to play.

Normally, the playback of these records is an inherently invasive process. Recently, techniques based upon optics and computing have been applied to create and analyze high resolution images of these materials. Pattern recognition methods are used to track the audio data in these images and to identify damage and sources of noise. By modeling the stylus motion the recorded sound can be reconstructed with no contact to the material. This approach, including studies of some of the earliest known sound recordings and unique ethnographic materials, are the focus of this talk and will be illustrated with sounds and images.

Free and open to the public. Additional information can be found at http://irene.lbl.gov