

# bulletin

## OF THE AMERICAN PHYSICAL SOCIETY

1 DECEMBER 1976

INCLUDING THE PROGRAM OF THE  
1976 WINTER MEETING AT STANFORD UNIVERSITY  
20-22 DECEMBER 1976

SESSION FC: THEORETICAL PHYSICS  
Wednesday morning, 22 December 1976  
Physics Lecture Hall 101 at 9:00 A.M.  
Helen R. Quinn, presiding

**FC 9** Direct Perception of Remote Geographical Locations.

H. E. PUTHOFF and R. TARG, Stanford Res. Inst.--Since 1972 we have been investigating facets of human perception that appear to fall outside the range of well-understood perceptual/processing capabilities. Of particular interest has been a human information-accessing capability that we call "remote viewing." This phenomenon pertains to the ability of certain individuals to access and describe, by means of mental processes, information sources blocked from ordinary perception, and generally accepted as secure against such access. In particular, the phenomenon we have investigated most extensively is the ability of a subject to view remote geographical locations up to several thousand km distant from his physical location given only a known person on whom to target. We have recently carried out coast to coast experiments using a computer to interface with individuals whose remote perceptual abilities have been developed sufficiently to allow them to describe--often in great detail--geographical or technical material such as buildings, roads, and natural formations. Our accumulated data indicate that both specially selected and unselected persons can be assisted in developing remote perceptual abilities up to a level of useful information transfer.

**FC 10** Some Physical Models Potentially Applicable to Observed Perception Data. E.A. Rauscher, Lawrence Berkeley Laboratory

--The purpose of this investigation is to utilize the remote perception experimental data base<sup>1</sup> to deduce what physical principles govern the accessing of remote, sensorily shielded information. The data base appears to be stable enough to allow us to make some definitive statements about the correlation of this data with principles and content of physics. We examine the constraints represented by this data in relationship to three major physics principles: Poincaré (Lorentz) invariance, analyticity (causality) and unitarity. We examine in detail some specific Lorentz invariant models as well as some quantum mechanical models, such as Bell's inequality, in relationship to the spacial and temporal properties of this data.

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1. H.E. Puthoff and R. Targ, IEEE, 64, 329 (1978).

**FC 11** EEG Correlates to Remote Stimuli Under Conditions of Sensory Shielding. R. TARG, H.E. PUTHOFF and E.C. MAY, Stanford Res. Inst.--We report evidence for a correlation between direct physiological measurement and a remote light stimulus blocked from ordinary perception. In pilot studies with a selected subject, a strobe light was placed 9m from a subject in a steel enclosure in a second room. EEG was recorded, and fast-Fourier-transforms (FFTs) were obtained. FFTs of the 168 intermixed periods of flash and no-flash conditions showed that the occurrence of the light flash correlated significantly ( $p < 0.03$ ) with a decrease in 9-11 Hz EEG production. Two formal studies were then carried out, each consisting of 14 runs of 40 trials making use of a battery operated lamp to eliminate any possibility of electromagnetic interference (EMI) associated with a conventional flash lamp. These studies again show significant correlations between EEG output and light flash stimulus. In the first study the 9-11 Hz EEG power again decreased during the stimulus condition ( $p < 0.02$ ); in the second study the EEG output increased during the stimulus condition ( $p < 0.01$ ). Although the subject was not able to guess the stimulus condition, the observed changes are consistent with a response on the part of the subject, albeit at a noncognitive level of awareness.