## XII. NOISE IN ELECTRON DEVICES<sup>\*</sup>

Academic and Research Staff

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## RESEARCH OBJECTIVES

Our research is concentrated in three areas: noise at optical frequencies, noise in frequency multipliers, and noise in parametric amplifiers.

The past experimental investigation of noise in optical lasers has led to the development of measurement techniques that enable one to discern the amplitude spectrum of incident light with high spectral resolution. These techniques are being developed to study diffusion speeds of small scatterers in liquid suspensions. The same techniques are under study for possible application to detection of microwave acoustic noise vibrations.

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