

## VIII. MICROWAVE ELECTRONICS\*

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### RESEARCH OBJECTIVES

Our group is concerned with theoretical and experimental studies of high-perveance electron beams suitable for interaction with microwave fields.

Experiments on the interaction of a high-density hollow electron beam with fields of klystron-type cavities have been carried out in our laboratory (several reports on this work have appeared in the Quarterly Progress Report). These experiments are being continued and correlated with the theory of gap interaction in such beams. The theory of wave propagation and excitation of electron-beam waveguides is also continuing.

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