

### XXX. CIRCUIT THEORY AND DESIGN\*

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#### RESEARCH OBJECTIVES

Investigations of nonlinear, time-variant linear, and linear active circuits are aimed at a better understanding of the relations between theoretical models and physical devices. Current research includes:

- (a) theoretical investigations, design, and experimental behavior of parametric amplifiers and frequency multipliers
- (b) determination of the invariant properties of active network components under various kinds of embedding
- (c) studies of transistor and tunnel-diode circuits
- (d) interpretation of a general  $v \cdot i$  conservation theorem.

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