## XXIX. CIRCUIT THEORY AND DESIGN

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## RESEARCH OBJECTIVES

We wish to investigate circuits containing devices that are nonlinear and/or time-variant and/or active, including transistors, tunnel diodes, and varactor diodes. Such investigations include (a) theoretical and experimental behavior of parametric amplifiers, frequency multipliers, mixers, transistor and tunnel-diode circuits; and (b) theoretical study of those properties that are invariant under certain types of imbeddings, in part by means of a general voltage-current conservation theorem.

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