

Comparison of SC and Room Temperature High Intensity Linacs, R.A. JAMESON, Los Alamos National Laboratory - Superconducting linac technology has become the technology of choice for accelerating structures and magnets in many modern electron and heavy-ion applications. There is strong interest presently in determining whether SC is the best technical and economic choice for future high-intensity light-ion linacs that are being proposed for advanced applications in nuclear waste treatment and electrical power generation, fusion materials testing, special materials production, and spallation neutron source research facilities. The latter application is a pulsed facility; the former are cw. Work by several groups on SC for cw high-intensity applications will be reviewed. The case for pulsed SC is less clear; areas requiring more detailed study are outlined.