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**The Legacy of Marshall Rosenbluth
in Laser-Plasma Interaction Research**

Abstract

Rosenbluth's seminal contributions to the physics of laser plasma interaction are reviewed here. His work on laser beat wave generation, parametric instabilities of laser light in plasmas, effects of the spatial inhomogeneity on these instabilities. Particular emphasis will be on the Raman and Brillouin scattering and their roles in laser fusion. Recent advances of relativistic laser plasma interaction and its application to the particle acceleration will also be discussed.