Discovery of the
Stimulated Brillouin Scattering


STIMULATED BRILLOUIN SCATTERING AND COHERENT GENERATION
OF INTENSE HYPERSOIC WAVES

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Ruby Laser
~50 MW; 30 nsec

MASER BEAM

GROUND GLASS

FABRY-PEROT INTERFEROMETER
(SPACING 0.16 CM)

LENS (f = 130 CM)

PHOTOGRAPHIC PLATE

MIRRORS

M1 (R=1)

M2 (R=0.1)

CRYSTAL

L1
(f=5CM)

Quarz or Sapphire

FIG. 1. Fabry–Perot interferograms of the maser radiation (range labeled M) and of the Brillouin sapphire radiation (range labeled B) from quartz.