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GM 7 Quantum Oscillations in the Metallic Compounds
Nb₃Sb and EuB₆.* D. LIEBOWITZ and D. J. SELLMYER,
Behlen Laboratory of Physics, U. of Nebraska, A. J.
ARKO, Argonne National Laboratory, and Z. FISK, U. of
California, LaJolla--Transverse magnetoresistance and
Shubnikov-de Haas (SdH) measurements were made on high-
purity Nb₃Sb and EuB₆ single crystals at 4.2 K and in
fields up to 210 kG. Five different SdH frequencies
were observed in Nb₃Sb; most of these agreed well with
previous dHvA measurements. A particularly large-
amplitude set of SdH oscillations with frequency about
2.8 MG was observed for B near <001>. These oscilla-
tions appear to be due to magnetic breakdown. The
results will be compared with recent calculations of
Mueller et al. and Klein et al. We report also the
first observations of quantum oscillations in a rare-
earth ferromagnetic compound: EuB₆, T_C=13.7 K.¹
Several SdH frequencies have been observed and studied
as a function of orientation.

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¹Z. Fisk et al., J. Appl. Phys. 50, 1911 (1979).