

FIG. 1. The phonon spectrum  $\alpha^2(\omega)F(\omega)$  of Pb at  $P = 0$  (black line) and  $P = 3445$  bar (dashed line).

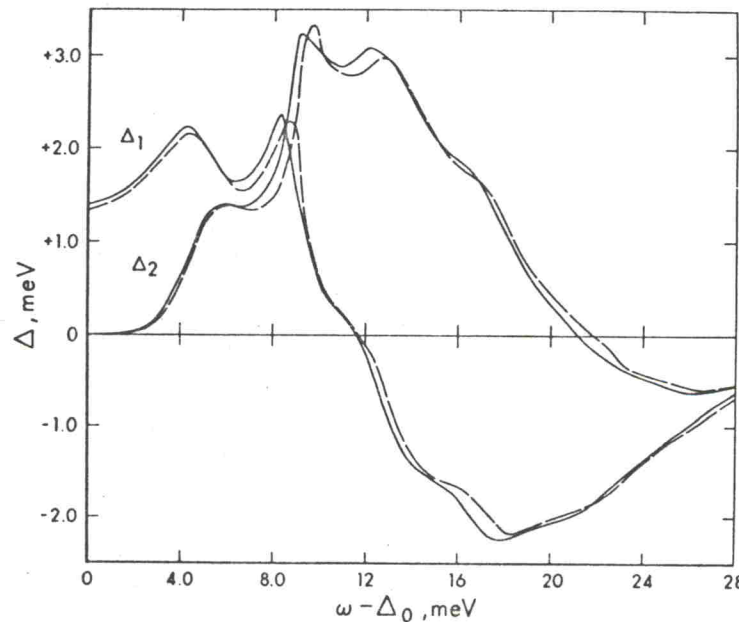


FIG. 2. Real part,  $\Delta_1$ , and imaginary part,  $\Delta_2$ , of the gap function of Pb.  $P = 0$ , black lines,  $P = 3445$  bar, dashed lines.

In Fig. 2 we give the complex gap function  $\Delta(\omega) = \Delta_1(\omega) + i\Delta_2(\omega)$  as function of energy and pressure. The phonon emission resonances are shifted to higher energies and somewhat reduced under pressure, indicating a move towards weaker coupling.

The Coulomb pseudo-potential,  $U_c$ , obtained from the inversion program is 0.12 at  $P = 0$  and 0.14 at  $P = 3445$  bar. This result is in good agreement with McMillan and Rowells' result, and also with the theoretical estimate of  $U_c \approx 0.11$ . It should be stated, however, that

is obtained with moderate dependence seriously.

The form from  $\alpha^2(\omega)$

- (i) the average  $\langle \alpha^2 \rangle$
- (ii) the definition

- (iii) the result
- (iv) an alternative introduction

$\langle \omega^2 \rangle =$

The result

$P$ (bar)
0
3445

The quantity  $\frac{d \ln \dots}{d \ln \dots}$  We estimate  $\pm 10\%$

The quantity  $\langle \alpha^2 \rangle$  is averaged heavily  $\frac{d \alpha^2}{d \dots}$  Scalap  $\dots$  to help explain In sp