that depended strongly on these details. However, in the light of the foregoing, it does seem that for a wide range of parameters, the character of the transition as reflected in  $C_p$  would be negligibly different from that in a rigid lattice. From Baker and Essam's exact solution it is now clear that the thermodynamic constraint to a finite  $C_v$  still admits the possibility that a model that has infinite  $C_v$  may be a good description of a real system in all but a

very small temperature region. It is also clear now (although in retrospect it should have been recognized earlier) that it is fallacious to compare the rigid-lattice heat capacity to the experimental  $C_{\nu}$ , as has often been attempted, because the constant-volume condition is not sufficient to prevent fluctuations of the interatomic distances.

I have had the benefit of numerous discussions with H. A. Kierstead on the subject of this comment.

PHYSICAL REVIEW B

VOLUME 2, NUMBER 5

1 SEPTEMBER 1970

## **ERRATA**

Bulk  $(H_{c\,2})$  and Surface  $(H_{c\,3})$  Nucleation Fields of Strong Coupling Superconducting Alloys, Gert Eilenberger and Vinay Ambegaokar [Phys. Rev. 158, 332 (1967)]. We wish to report an error in the final evaluation of our formulas, which renders spurious the former good agreement between experimental and theoretical results. Formula (4.7) was transcribed incorrectly from the Bardeen-Stephen paper, it reads correctly

$$I_1 + I_1' = (2\pi)^{-1} \left( \frac{\partial H_c(T_c)}{\partial T} \right)^2$$
 (4.7)

Consequently,

$$\left(\frac{H_{c2,\text{obs}}}{H_{c2,\text{BCS}}}\right)_{T-T_c} = \left(\frac{H_{c,\text{obs}}^2}{H_{c,\text{BCS}}^2}\right)_{T-T_c}.$$
 (4.13)

The predicted strong coupling correction for lead turns out to be only

$$\frac{H_{c,\text{obs}}^2 \, \Delta_{\text{obs}}^2}{H_{c,\text{BCS}}^2 \, \Delta_{\text{obs}}^2} = 1.2, \tag{5.10}$$

$$-\left(\frac{\partial H_{c3}}{\partial T}\right)_{T_c} = 115 \,\chi^{-1}(\rho) \,\mathrm{Oe}/^{\circ}\mathrm{K} \tag{5.11}$$

in serious disagreement with the experimental value 206  ${\rm Oe}/{\rm ^{\circ}K}$ . Since we have reduced our for-

mulas to a consistency check between quantities that are measurable with good accuracy [with the possible exception of the factor  $(S/S_0)^2 = 0.5$  contained in the right-hand side of (5.11)] this discrepancy remains to be explained. A similar discrepancy seems to exist for the ratio  $\kappa_2(T=0)/\kappa_2(T=T_c)$  of dirty lead alloys [K. Usadel (private communication)]. We wish to thank K. Usadel for pointing out to us the error in our Eq. (4.7).

Microwave, Flux Flow, and Fluctuation Resistance of Dirty Type-II Superconductors, Richard S.

Thompson [Phys. Rev. B1, 327 (1970)]. The right-hand side of Eq. (27) should be divided by  $[1 + (2\tilde{\omega})^2]$ .

Five lines above Eq. (27) the expression replacing  $q^{-2}$  should read

$$\frac{\xi^4 a^2}{(\pi \omega/8 T_c)^2 + (\xi q)^4} \ .$$

The right-hand sides of Eq. (25)-(27) should be multiplied by  $\sigma$ .

Above Eq. (15) the last factor in the expression for the momentum element should be  $d\theta/2\pi$ .

The expression  $\text{Re } Q' \cdots$  appearing at the beginning of Eq. (12) should be moved up to appear at the beginning of Eq. (11).

<sup>&</sup>lt;sup>1</sup>G. A. Baker, Jr., and J. W. Essam, Phys. Rev. Letters <u>24</u>, 447 (1970).

<sup>&</sup>lt;sup>2</sup>L. Patrick Phys. Rev. <u>93</u>, 384 (1954).

<sup>&</sup>lt;sup>3</sup>D. S. Gaunt and C. Domb, J. Phys. C 1, 1038 (1968).