Corrections
after (3.31) Stirling
eq. (16.8) $-$ in front of $\frac{\partial J}{\partial \mu}$
eq. (16.19) $\bar{n}$ instead of n
eq. (16.20) and (16.21) factor k_{B} in front of the sum
eq. (18.2) without minus-sign before $k_{\mathrm{B}}T \ln Y$
In (18.5) c^2 instead of c^3, value added
In (18.12) $k_{\mathrm{B}}T\omega^2$ instead of $k_{\mathrm{B}}T\omega^3$
Remove +... from eq. (19.4)
In (19.11) π^2 instead of π^3
In the paragraph after (19.20) 'the contribution to the specific heat' insted of 'the specific heat'
In (20.10) C_V instead of c_V
In (20.14) $-2\sqrt{-\pi\beta\mu}$
Replace after (21.15) $\sqrt{...}$ by $2\sqrt{...}$
In (21.18) $\ln(\sum_n ...)$
In (22.6) additional factor V
In (22.11) and (22.12) $\mathrm{d}\epsilon$ to be added
After (22.12) added: In the second integral we have replaced the lower bound by $-\infty$, which is allowed as long as $\mu \gg k_{\mathrm{B}}T$, since then $f_T(x) - f_0(x)$ is very small.
In (22.18) a factor $z(\epsilon_{\mathrm{F}})$ to be added
In (22.19) one parenthesis (to be removed
In (24.4) $\langle \hat{Q}_i \hat{S} \rangle$ instead of $\mathrm{tr}(\hat{Q}_i \hat{S})$
In (24.6) add $-K$ in the expression for $\hat{S}$
In (24.7) T instead of t
In 24 and 25 always C instead of c for the specific heat
Sentence after (28.2): Thus one obtains, that the states at time t' are also orthonormal
In the paragraph after (28.4) inserted: The eigenvalues ρ_n are unchanged.
In (28.6) $\ln \bar{n}_{\mathbf{k}}$ instead of $\ln n_{\mathbf{k}}$
In (29.14) μ_{b0} instead of μ_{m0}
Add in the first sum in (30.1) the factor $\mathrm{e}^{N\mu/k_{\mathrm{B}}T}$
In (30.7) $b_{kl}(T)$
In (30.9) $O(\frac{\mathrm{e}^{3\beta\mu}}{\lambda^9})$
After (30.15) $a = -\frac{1}{2}\int_{r>c} \cdots$
Add ... $= \mathrm{d}\mu'$ to (31.8)
In (32.25) ... $= -k_{\mathrm{B}}T^2 \frac{\partial \ln c_{\mathrm{s}}}{\partial T}$.
In (32.26) parentheses $(G_e - G_a)$ and $(g_1 - \mu')$
In (33.6) add $= 0$.
In (34.3) P statt P_0
In the text after (34.3) $b(T)$ instead of b
In (34.14) v_2^3 instead of v_2^2
Before (34.20) "thus for $t < 0$"
To (34.21) $T < T_{\mathrm{c}}$
Add to (35.24) $n = N/V$.
In (35.33) χ instead of $\chi(T)$
After (36.2) "the now local order-parameter $m(r)$" instead of "order-parameter"
At the end of (36.b) "$d = 4$" instead of "it"
In (36.15) a_0 instead of a'
In (3.14) $\rho(\mathbf{p}, \mathbf{x})$ instead of $\rho(p, x)$
In (6.1) the factor ρ_0 has been added in front of $(\Theta - \Theta)$
In (7.9) the factor m has been added in the denominator of the last expression
In (7.11) a factor k_{B} has to be added in front of the ln
In (8.5) a bracket has to be added on the right hand side
On the right hand side of (9.8) β has to be replaced by $\ln \beta$
In (10.2) a factor ρ_0 has to be inserted after the second equals sign

In (11.6) the factor 1/2 has been added to the kinetic energy
In (11.14) the potential energy has been explicitely divided into the interaction energy H_{int} between the atoms and the interaction energy H_{W} between the atoms and the wall.
In (11.15) H_{int} instead of H_{pot}. $\delta\alpha\beta$ has to be replaced by $\delta_{\alpha\beta}$.Furthermore a factor 1/2 has to be inserted after the last equals sign
In (11.17) w instead of W_{a}
In (15.11) one should read $\partial(F(T,N,V)/k_{\mathrm{B}}T)/\partial T$
After (20.7) the text "Thus equation (20.4) yields for $T < T_c$ only the number of excited bosons but not their complete number." has been added
In (32.22) an Index $_1$ has to be added to g and N has to be replaced by $\bar{N}$
Eq. (16.5) corrected

$$Y = \mathrm{tr}(\mathrm{e}^{-\beta(H-\mu\hat{N})}) = \sum_{\dots n_{\mathbf{k},m}\dots} \mathrm{e}^{-\beta(E(\{n\})-\mu N(\{n\})} = \dots \tag{A.14}$$

Correct explanation for (28.6) given, now eqs. (28.6) to (28.9)