

63 (10)

$$\int_{\lambda_0}^{\infty} (\lambda - \lambda_0) d(\|E(\lambda) f\|^2) = 0$$

63 (11)

$$\int_{-\infty}^{\lambda_0} (\lambda_0 - \lambda) d(\|E(\lambda) f\|^2) = 0$$

66 (5)

Anzahl von p's

81 (-7)

$$R \int_0^{\infty} e^{-\lambda t} d(E(\lambda) f, f) = (f, f) \int_0^{\infty} \dots = 0$$

89 (11), (12)

$$\int_{\lambda_0}^{\lambda_0 + \epsilon} \frac{\lambda - \lambda_0}{\epsilon} d(E(\lambda) f, S_{\epsilon})$$

91 (4)

M_{λ}

147 (15)

$[M_0, M_1, \dots]$ die Gesamtheit aller Indexsysteme n_0, \dots, n_s

$$\int_{-\infty}^{\lambda_0} (\lambda - \lambda_0) d(\|E(\lambda) f\|^2) = 0$$

$$\int_{\lambda_0}^{\infty} (\lambda - \lambda_0) d(\|E(\lambda) f\|^2) = 0$$

Anzahl von p's (oder: Anzahl von Summanden)

$$R \int_0^{\infty} e^{-\lambda t} d(E(\lambda) f, f) = (f, f) \int_0^{\infty} \dots = 0$$

$$\int_{\lambda_0}^{\lambda_0 + \epsilon} \frac{\lambda - \lambda_0}{\epsilon} d(E(\lambda) f, S_{\epsilon})$$

M_{λ}

$[M_0, M_1, \dots]$ die Gesamtheit aller Indexsysteme n_0, \dots, n_s

in denen M_0 -mal die 0, M_1 -mal die 1, ... vorkommt - es sind genau $M_0! M_1! \dots$ verschiedene.

I think that what is here meant is that we have to assign to the indices n_0, \dots, n_s the numbers of a set of S numbers in which the 0 appears M_0 -times, the 1 appears M_1 -times, ... But then, the number of distinct systems n_0, \dots, n_s under such a condition equals the number of permutations of S elements among which there are M_0 equal to 0, M_1 equal to 1, ... and this number is $\frac{S!}{M_0! M_1! \dots}$ and not $M_0! M_1! \dots$. Therefore we should change the subsequent text from p. 147 (19) to (-15) as follows: Since $\phi_{n_0, n_1, \dots}$ is a series of $\frac{S!}{M_0! M_1! \dots}$ distinct terms, each of which appears

13 (-2)

"so folgt aus Δ_3 . $g(q) = 0$ für $q \geq 0$ " ... $h(q) = 0$ für $q \geq 0$ "

and on the "Annahme 3"

" $g(q) = 0$ bis auf eine Menge -"

" $h(q) = 0$ bis auf eine Menge. -"

(*) 19 (-3, -2), 20 (-14), 21 (7)

b

R

35 (-10)

$$\int_{\Omega} \left| \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi_s} - \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi^{(n_s)}} \right|^2 \leq \sum_{s=1}^{\epsilon} \int_{\Omega} \left| (\rho_s + i\sigma_s) f_{\pi_s} - (\rho_s + i\sigma_s) f_{\pi^{(n_s)}} \right|^2$$

I was not able to establish that inequality. It is clear that the relation $\int_{\Omega} |z_s|^2 \leq \sum_{s=1}^{\epsilon} \int_{\Omega} |z_s|^2$ is ~~in general not true~~ does not hold in general. ~~There~~ (modified slightly) the demonstration in the following way:

$$\int_{\Omega} \left| \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi_s} - \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi^{(n_s)}} \right|^2 = \left\| \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) (f_{\pi_s} - f_{\pi^{(n_s)}}) \right\|^2$$

and using theorem 2, II.1,

$$\begin{aligned} \left\| \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) (f_{\pi_s} - f_{\pi^{(n_s)}}) \right\| &\leq \sum_{s=1}^{\epsilon} \sqrt{\rho_s^2 + \sigma_s^2} \|f_{\pi_s} - f_{\pi^{(n_s)}}\| = \sum_{s=1}^{\epsilon} \sqrt{\rho_s^2 + \sigma_s^2} \cdot \left\{ \text{measure of } (\pi_s, \pi^{(n_s)}) \right\}^{\frac{1}{2}} \\ &< \sqrt{\epsilon} \sum_{s=1}^{\epsilon} \sqrt{\rho_s^2 + \sigma_s^2}, \end{aligned}$$

and taking $\epsilon = \frac{\delta^2}{\left\{ \sum_{s=1}^{\epsilon} \sqrt{\rho_s^2 + \sigma_s^2} \right\}^2}$ it follows from here

$$\left\| \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi_s} - \sum_{s=1}^{\epsilon} (\rho_s + i\sigma_s) f_{\pi^{(n_s)}} \right\| < \delta.$$

(*)

57 (5), 58 (-8, -1), 57 (3)

$$\sum_{\mu, \nu} h_{\mu\nu} \xi_{\mu} \bar{\eta}_{\nu}$$

$$\sum_{\mu, \nu} h_{\mu\nu} \xi_{\nu} \bar{\eta}_{\mu}$$

repeated $H_0! H_0! \dots$ times, every pair being orthogonal and every term being of modulus 1, the square root of the modulus of $\Phi_{H_0 H_0} = \frac{(H_0! H_0! \dots)^2 S!}{H_0! H_0! \dots}$, to be precise to say, $|\Phi_{H_0 H_0}| = \sqrt{S! \sqrt{H_0! H_0! \dots}}$ etc. These

the functions $\Phi_{H_0 H_0 \dots} (\mu_1, \dots, \mu_s) = \frac{1}{\sqrt{S! \sqrt{H_0! H_0! \dots}}} \Phi_{H_0 H_0 \dots} (\mu_1 \dots \mu_s) \dots$ etc."

The rest of the text remains unchanged.

193 (12)

"Wir können also sagen: das $[S_1, \dots, S_N]$ -Gas hat die Temperatur T angenommen." Perhaps it would be better to speak of a $[K_1, \dots, K_N]$ gas, instead of $[S_1, \dots, S_N]$, for ~~they~~ ^{it} ~~do~~ the boxes K_1, \dots, K_N which act as gas ~~molecules~~ molecules, not the systems S_i . Moreover, in 193 (16) it is stated: "denn der Unterschied zwischen U -Gesamtheit und dem U -Gas von Temperatur 0 verschwindet, weil die K_1, \dots, K_N des letzteren ..." which, I think, ~~is~~ ^{is} ~~by~~ ^{by} the terminology $[K_1, \dots, K_N]$ -Gas. ~~scribbled~~

203 (11 and following)

From the beginning of this & the eigen-functions and eigen-values of U were called ψ_i, w_i and ~~and~~ ^{From} ~~from~~ here to the end, the ~~notation~~ ^{notation} is reversed. ~~was called~~ ^{was called} those of $R\psi_i$.

In the same way, the matrix associated ~~to~~ ^{to} an operator R is defined first by $a_{uv} = (R\psi_u, \psi_v)$ (e.g., on pages 50, 93, 100, 292 (N. 60); 299 (N. 13), according to ~~which~~ ^{which} $R\psi_u = \sum_a a_{av} \psi_a$. But on p. 167 and following ~~is~~ ^{is} ~~adopted~~ ^{adopted} the notation ~~$a_{uv} = (R\psi_u, \psi_v)$~~ ^{$a_{uv} = (R\psi_u, \psi_v)$} and, therefore, $R\psi_u = \sum_a a_{av} \psi_a$. In my translation I have maintained the first agreement throughout the book.