

set determining \mathfrak{N} ; and moreover it is seen that the same result is true of $\{\Psi_\mu^*\}$.

Remark 2. It is found immediately from the method of the proof of Theorem A that, if the (one-dimensional or two-dimensional) measure of $\Delta(N)$ is zero, the second member in the right-hand side of (1) vanishes and $\{\varphi_\nu\}$ is a complete orthonormal set, and that, if, on the contrary, the point spectrum of N is empty, N is expressed by that second member in which the orthonormal set $\{\psi_\mu\}$ is complete.

Corollary A. If, in Theorem A, $f(z)$ is a function holomorphic on the closed domain $D\{z: |z| \leq \|N\|\}$, then $\|f(N)\psi_\mu\|^2$, $\mu=1, 2, 3, \dots$, assume the same value, which will be denoted by σ' ; and if, in addition, we choose arbitrarily a complex constant c' with absolute value $\sqrt{\sigma'}$ and put $\Psi'_\mu = \sum_j u'_{\mu j} \psi_j$ where $u'_{\mu j} = (f(N)\psi_\mu, \psi_j)/c'$ and \sum_j denotes the sum for all $\psi_j \in \{\psi_\mu\}$, then the equality

$$f(N) = \sum_\nu f(\lambda_\nu) \varphi_\nu \otimes L_{\varphi_\nu} + c' \sum_\mu \Psi'_\mu \otimes L_{\psi_\mu}$$

holds on \mathfrak{H} and the matrix (u'_{kj}) associated with all the elements of $\{\psi_\mu\}$ possesses the same characters as those of the matrix (u_{kj}) described in Theorem A.

Proof. Since, by definition, we have $f(N) = \int_D f(z) dK(z)$, which implies that the adjoint operator $f^*(N)$ of $f(N)$ is given by $f^*(N) = \int_D \overline{f(z)} dK(z)$, and since, by hypotheses, $f(z)$ is holomorphic on D , there is no difficulty in showing that

- 1° $f(N)$ is a bounded normal operator in \mathfrak{H} ;
- 2° the point spectrum of N is given by $\{f(\lambda_\nu)\}_{\nu=1,2,3,\dots}$, and φ_ν is an eigenelement of $f(N)$ corresponding to the eigenvalue $f(\lambda_\nu)$;
- 3° the continuous spectrum of $f(N)$ also is given by the image of $\Delta(N)$ by $f(z)$.

Accordingly the present corollary is a direct consequence of Theorem A.

Correction to Sakuji Inoue: "Functional-Representations of Normal Operators in Hilbert Spaces and Their Applications" (Proc. Japan Acad., Vol. 37, No. 10, 614–618 (1961)).

Page 614, line 17 from bottom: read " $\sum_{j=1}^{\infty}$ " in place of " $\sum_{j=1}^{\infty}$ ".

Page 615, line 1: read " b_μ " in place of " b_μ ".

Page 616, line 1: read " $\overline{L_{\varphi_\nu}(y)}$ and $\overline{L_{\psi_\kappa}(y)}$ " in place of " $\overline{L_{\varphi_\nu}(y)}$ and $\overline{L_{\psi_\nu}(y)}$ ".

Page 617, line 18: read "relations" in place of "velations".