

complete characterization of the wave- and τ -functions of differential equations.

4. Finally we mention a few words on the introduction of the parameter $A = {}^t A = (\lambda_{\mu\nu})_{\mu, \nu=1, \dots, n}$. We assume $\lambda_{\nu\nu} = 1$ ($\nu = 1, \dots, n$) and that A is real, positive definite. In place of (3) we set the following monodromic property for an n -tuple $w = (w^{(1)}, \dots, w^{(n)})$

$$(22) \quad \gamma w = w \cdot \rho_{l_1, \dots, l_n, A}(\gamma), \quad \gamma \in \pi_1(X'; x_0)$$

where $\rho_{l_1, \dots, l_n, A}(\gamma) = 1 + (e^{-2\pi i l_\nu} - 1) E_\nu A$, $E_\nu = (\delta_{\mu\nu} \delta_{\mu'\nu})_{\mu, \mu'=1, \dots, n}$. Using (22)

we define $W_{*a_1, \dots, a_n}^{l_1, \dots, l_n}(A)$ analogously, where (4) _{ν} is to be replaced by

$$(23)_\nu \quad w^{(\nu)} = \sum_{j=0}^{\infty} \lambda_{\mu\nu} c_{-l_\nu+j}^{(\nu)}(w) \cdot v_{-l_\nu+j}[a_\nu] \\ + \sum_{j=0}^{\infty} \lambda_{\mu\nu} c_{l_\nu+j}^{*(\nu)}(w) \cdot v_{l_\nu+j}^*[a_\nu] \\ + \text{regular function}$$

for $* = B$. Modification for $* = F$ is obvious (note that this definition differs from VII-(19) for $|l_\nu| > 1/2$). The inner product is defined similarly, with the integrand replaced by the single-valued functions $\partial_{\bar{z}} v \cdot A^{-1t}(\partial_z \bar{v}') + m^2 v A^{-1t} \bar{v}'$ or $w_+ A^{-1t} \bar{w}'_+ + w_- A^{-1t} \bar{w}'_-$. All the results of §§ 1-3 are generalized to the case of $W_{*a_1, \dots, a_n}^{l_1, \dots, l_n}(A)$ as well. Details will appear in [3].

Errata. IV [1], P. 183, l. 11: $C_{F,l}[A]_l w$ should read $C_{F,l} w_l[A]$.

VII [2], P. 39, l. 2: The definition of M_ν should read

$$M_\nu = 1 + (e^{2\pi i l_\nu} - 1) E_\nu A.$$

References

- [1] M. Sato, T. Miwa, and M. Jimbo: Proc. Japan Acad., **53A**, 147-152, 153-158, 183-185 (1977).
- [2] —: Ibid., **54A**, 36-41 (1978).
- [3] —: Holonomic Quantum Fields. III, RIMS preprint, no. 260; ditto. IV, *ibid.*, no. 263.
- [4] —: Publ. RIMS, **14**, 223-267 (1978).
- [5] —: Proc. Japan Acad., **53A**, 219-224 (1977).