

Corrections for  
*Fractional calculus of Weyl algebra and Fuchsian differential equations*  
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- p.5  $\ell.5$  But we  $\rightarrow$  But when we
- p.6  $\ell.11$  the integral  $\rightarrow$  integral
- p.9  $\ell.5 \sim 6$   $n_p \rightarrow n_j$   
 $\ell.-3 \sim -1$  differential operators  $\rightarrow$  differential operators with  $\{\lambda_{\mathbf{m}}\}$
- p.10  $\ell.1$  Here  $\tau \in \mathbb{C}$  and  $\rightarrow$  Here  $\lambda_{j,\nu} \in \mathbb{C}$ ,  $\tau \in \mathbb{C}$ ,  $\mathbf{m} = (m_{j,\nu})_{\substack{j=0,\dots,p \\ \nu=1,2,\dots}}$  with  $m_{j,\nu} = 0$   
 for  $\nu > n_j$ ,
- p.22  $\ell.18$   $\frac{\tilde{A}_j}{x-c_j} \rightarrow \frac{\tilde{A}_j(\mu)}{x-c_j}$   
 $\ell.20$   $A = \tilde{A}_1 + \dots + \tilde{A}_p \rightarrow A(\mu) = \tilde{A}_1(\mu) + \dots + \tilde{A}_p(\mu)$   
 $I_n \rightarrow I_m$
- $\ell.21$  with  $\rightarrow$  with  $A = A(-1)$  and  
 $\ell.-7 \sim -6$   $(A + \mu) \rightarrow A(\mu)$
- p.27  $\ell.11 \sim 12$   $c, c_{n-2}, c_0, c_j \rightarrow b, b_{n-2}, b_0, b_j$
- p.32  $\ell.-11$  pathes  $\rightarrow$  paths  
 $\ell.-7$   $V_j \rightarrow V$
- p.33  $\ell.-4$  resp,  $\rightarrow$  resp.
- p.37  $\ell.-8$   $k \rightarrow q$
- p.38  $\ell.-5$   $q' \rightarrow q$
- p.41  $\ell.18$   $n_k \rightarrow n_p$
- p.42  $\ell.-15$   $(\delta_{\mu\nu})_{\substack{1 \leq \mu \leq n_i \\ 1 \leq \nu \leq n_j}} \rightarrow (\delta_{\mu\nu})_{\substack{1 \leq \mu \leq m_i \\ 1 \leq \nu \leq m_j}}$
- p.51  $\ell.8$   $\text{Ad}(p^\mu) \rightarrow \text{Ad}(\partial^\mu)$
- p.54  $\ell.-1$   $\prod_{j=1}^n \rightarrow \prod_{j=1}^p$
- p.56  $\ell.17$   $\sum_{j=0}^k \rightarrow \sum_{j=0}^p$
- p.57  $\ell.1$  realizablej  $\rightarrow$  realizable)
- p.61  $\ell.3$   $(1 \leq j \leq n) \rightarrow (1 \leq j \leq p)$   
 $\ell.17$   $\sum_{\nu=1}^{n_j} \sum_{i=0}^{m_{j,\nu}-1} (\lambda_{j,\nu} + i) \rightarrow \left( \sum_{\nu=1}^{n_j} \sum_{i=0}^{m_{j,\nu}-1} (\lambda_{j,\nu} + i) - \frac{n(n-1)}{2} \right)$
- p.64  $\ell.-10 \sim$  p.65  $\ell.20$   $P(k, c), P_k(c_1, \dots, c_k)$  etc.  $\rightarrow P(k, g), P_k(g_1, \dots, g_k)$  etc.
- p.65  $\ell.-7 \sim -6$   $|\{\lambda_{\mathbf{m}}\}| \rightarrow |\{\lambda_{\mathbf{m}'}\}|$   
 $\ell.-1$   $|\lambda_{\mathbf{m}'}| \rightarrow |\{\lambda_{\mathbf{m}'}\}|$
- p.73  $\ell.5$   $\Delta^+ \rightarrow \Delta_+$
- p.74  $\ell.-13$  and  $\mathfrak{h}_\infty^\vee = \bigcup_{j \geq 0} \mathfrak{h}_j^\vee \Rightarrow$  detete!  
 $\ell.-10$   $(i - \nu) \rightarrow (\nu - i)$   
 $\ell.-2$   $(\forall i \rightarrow (\forall \alpha_i$
- p.75  $\ell.2$   $+\delta_{i,0})\mu \rightarrow +\delta_{i,0})\mu)$   
 $\ell.13$  iii)  $\rightarrow$  iv)
- p.87  $\ell.-3$   $\mathbf{A} \rightarrow mc_\mu(\mathbf{A}), \mathbf{A}' \rightarrow \mathbf{A}$
- p.91  $\ell.-13$   $\nu = 1, \dots, n_j, \nu' = 1, \dots, n_j \rightarrow 1 \leq \nu < \nu' \leq n_j$
- p.93  $\ell.12$   $M_{j+1} \cdots M_{i-1} \rightarrow M_{j-1} \cdots M_{i+1}$
- p.94  $\ell.4$  Here  $Z(\mathbf{m}) \rightarrow$  Here we assume that  $\mathbf{M}$  is a generic point of the algebraic variety  $V_2$  and  $Z(\mathbf{m})$   
 $\ell.9$  the isotropy group ... equals

- the Lie algebra of the isotropy group ... is identified with
- ℓ.19  $= t\left(\sum_{j=0}^p \rightarrow = -t\left(\sum_{j=0}^p$
- ℓ.-10  $V_1 \rightarrow V_2$
- ℓ.-3  $Z(M_j)$  and  $\bigcap_{j=0}^p \ker({}^tA_j - 1) \simeq Z(\mathbf{M})$ .  
→  $Z(M_j)$ . In particular, we have  $\bigcap_{j=0}^p \ker({}^tA_j - 1) \simeq Z(\mathbf{M})$  if  $H_j = M_j$  for  $j = 0, \dots, p$ .
- p.95 ℓ.16  $\ker X$  (resp.  $\text{Im } X$ ) →  $\text{Im } X$  (resp.  $\ker X$ )
- ℓ.8 irreducible, Thus → irreducible. Thus
- p.96 ℓ.2 Put  $\bar{\mathbf{m}}' = \gcd(\mathbf{m}')^{-1}\mathbf{m}'$ . ⇒ delete!
- ℓ.4  $\alpha_{\bar{\mathbf{m}}''} \rightarrow \alpha_{\mathbf{m}''}$
- p.102 ℓ.18  $1 \leq \nu_j$  such that it satisfy →  $1 \leq \nu \leq n_j$  satisfying
- p.104 ℓ.14 corollary → theorem
- p.110 ℓ.-11 Theorem 13.8 → Theorem 13.2
- p.112 ℓ.-5  $m'_{j_0, n'_{j_0+1}} \rightarrow m'_{j_0, n'_{j_0}+1}$
- p.113 ℓ.2  $P_{\mathbf{m}}^{j_0}(\lambda) \rightarrow P_{\mathbf{m}'}^{j_0}(\lambda)$
- ℓ.20 examples → such examples
- ℓ.23  $(211, 221, 221; 110, 110, 110) \rightarrow (2111, 221, 221; 1100, 110, 110)$
- p.118 ℓ.-5  $0 \leq x < 1 \rightarrow 0 < x < 1$
- p.120 ℓ.12  $x = \frac{1}{c_j} \rightarrow x = c_j$
- ℓ.-8  $c_0 = \infty \rightarrow c_j = 0$
- p.126 ℓ.-10  $\mathbb{L} \rightarrow \mathbb{C}$
- p.136 ℓ.12 maximal order 6 12 ... 66 72 → maximal order 1 6 ... 66
- p.143 ℓ.-1  $(x-1)^{\lambda_1+\mu+k} \rightarrow (1-x)^{\lambda_1+\mu+k}$
- p.150 ℓ.-1 These connection ... etc. ⇒ delete!
- p.155 ℓ.-12  $((\alpha_1, \rightarrow (\alpha_1,$
- p.188 ℓ.-4 airy → Airy