ERRATUM

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M. Przanowski, J. Tosiek, The Weyl–Wigner–Moyal Formalism. III. The Generalized Moyal Product in the Curved Phase Space *Acta Phys. Pol.* **B30**, 179 (1999).

In our previous paper published recently in the Acta Physica Polonica B there are some misprints which may lead to severe misunderstanding. First, the formula (62) should read

$$\partial^{(g)}a = d^{(g)}a + g^{-1}\frac{1}{i\hbar}[\Gamma_g, a_g] = d^{(g)}a + \frac{1}{i\hbar}[\Gamma, a]^{(g)}$$

$$d^{(g)}a \stackrel{\text{def}}{=} g^{-1}dg. \tag{62}$$

Consequently, the formulas (64), (65), (66) and (67) read

$$R \stackrel{\text{def}}{=} d^{(g)}\Gamma + \frac{1}{2i\hbar}[\Gamma, \Gamma]^{(g)}, \tag{64}$$

$$D^{(g)}a = d^{(g)}a + \frac{1}{i\hbar}[\tilde{\Gamma}, a]^{(g)}, \tag{65}$$

$$\Omega = d^{(g)}\tilde{\Gamma} + \frac{1}{2i\hbar}[\tilde{\Gamma}, \tilde{\Gamma}]^{(g)} \tag{66}$$

and

$$D^{(g)}a = d^{(g)}a + \frac{1}{i\hbar}[\Gamma + \gamma, a]^{(g)}. \tag{67}$$

Observe that due to our choosing of the symplectic connection one gets that

$$d(g\Gamma) = d\Gamma \quad \text{and} \quad gR = R.$$

Hence, R defined by (64) is equal to R defined by (55). Finally, instead of (89) we have

$$g\partial^{(g)}R = \frac{1}{4}R_{i_1i_2j_1j_2;l}X^{i_1}X^{i_2}dq^{j_1}\wedge dq^{j_2}\wedge dq^l$$

$$= \frac{1}{12}\Big(R_{i_1i_2j_1j_2;l}X^{i_1}X^{i_2}dq^{j_1}\wedge dq^{j_2}\wedge dq^l$$
$$+R_{i_1i_2lj_1;j_2}X^{i_1}X^{i_2}dq^l\wedge dq^{j_1}\wedge dq^{j_2}$$
$$+R_{i_1i_2j_2l;j_1}X^{i_1}X^{i_2}dq^{j_2}\wedge dq^l\wedge dq^{j_1}\Big)\,. \tag{89}$$