

ERRATUM to 'Maxwell's Equations in Segal's Model: Solutions and their Invariance', by M. Cahen and S. Gutt, *LMP* 4 (1980), 275–287.

The following replaces what follows Proposition 3 in Section 5:

If $x \in Q_1^4$ and \mathcal{A}_x is the stabilizer of x in \mathcal{A} ; if $\varphi \in \mathcal{A}_x$ and if μ belongs to the stabilizer of x in $C^0(Q_1^4)$ (= connected component of the conformal group of Q_1^4), then $\varphi^{-1} \circ \mu \circ \varphi \in C^0(Q_1^4)_x$ and $\varphi_{*x}^{-1} \circ \mu_{*x} \circ \varphi_{*x}$, which is the differential at x of a conformal transformation, belongs to $O(1, 3)$. $\mathbb{R} = \text{def } P$. This says that φ_{*x} belongs to $N(P)$ (= normalizer of P in $GL(4, \mathbb{R})$).

Let P_0 be the connected component of P and let $N(P_0)$ be its normalizer in $GL(4, \mathbb{R})$; clearly $N(P) \subset N(P_0)$. Let \mathcal{P} be the Lie algebra of P and \mathcal{P}' be its derived ideal.

LEMMA 1. *The group $N(P_0)$ is contained in P .*

Indeed, let $\mu: N(P_0) \rightarrow \text{Aut } \mathcal{P}'$ be the homomorphism induced by the adjoint action. If $A \in \mathcal{P}'$ one has

$$gA + {}^t(gA) = 0$$

where g is the matrix associated to g_x . Let $n \in N(P_0)$; then

$$g\mu(n)A = -{}^t(g\mu(n)A) \quad (*)$$

for all $A \in \mathcal{P}'$. The relation (*) implies easily that

$${}^t n g n = \lambda g, \quad \lambda \in \mathbb{R}.$$

Hence the lemma.

From Lemma 1 one deduces that φ_{*x} belongs to P and thus $(\varphi^*g)_x = k^2 g_x$. As $C^0(Q_1^4)$ is transitive on Q_1^4 one gets

THEOREM 2. *The group of admissible transformations of Segal's model is the conformal group $C(Q_1^4)$.*