## Erratum

# Erratum to: Unitary Representations of Super Lie Groups and Applications to the Classification and Multiplet Structure of Super Particles 

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Professor Hadi Salmasian has drawn our attention a misstatement in Lemma 1 where the correct statement should be $X \mathcal{B} \subset \mathcal{B}$. In the corrigendum below we insert this correction and a small set of consequent corrections in Lemma 1 as well as Propositions 2 and 3.

We thank professor Salmasian for this.

1. p. 222: In item (ii) of Lemma 1, replace "such that $X \mathcal{B} \subset D(X)$ " with "such that $X \mathcal{B} \subset \mathcal{B}$ ".
2. p. 222: In the last statement of Lemma 1, replace "if we only assume that $\mathcal{B}$ is invariant under $H$ and contains a dense set of analytic vectors" with "if we only assume that $\mathcal{B} \subset D(H)$ and contains a dense set of analytic vectors for $H$ ".
3. p. 222: In the last paragraph of the proof of Lemma 1, replace "Finally, let us assume that $H \mathcal{B} \subset \mathcal{B}$ and that $\mathcal{B}$ contains a dense set of analytic vectors for $H$ " with "Finally, let us assume that $\mathcal{B} \subset D(H)$ and that $\mathcal{B}$ contains a dense set of analytic vectors for $H^{\prime \prime}$.
4. p. 222: In the last paragraph of the proof of Lemma 1, replace "we have $X^{2 n} \psi=$ $H^{n} \psi \in \mathcal{B}$ and $X^{2 n+1} \psi \in D(X)$ by assumption, and" with "we have $\psi \in D\left(X^{n}\right)$ for all $n$ by $X$-invariance of $\mathcal{B}$, and".
5. p. 226, last paragraph before Proposition 2: In item (b)-(vi), replace " $\rho(X) \mathcal{B} \subset$ $D(\rho(Y))$ for all $X, Y \in \mathfrak{g}_{1}$ " with " $\rho(X) \mathcal{B} \subset \mathcal{B}$ for all $X \in \mathfrak{g}_{1}$ ".
6. p. 227, in the proof of Proposition 2: Before the paragraph beginning with "It remains only to show...", add the following paragraph: "We now prove that, for all $X \in \mathfrak{g}_{1}$, the operator $\bar{\rho}(X)$ is odd on $C^{\infty}\left(\pi_{0}\right)$. If $P_{i}: \mathcal{H} \rightarrow \mathcal{H}$ is the orthogonal projection onto $\mathcal{H}_{i}$, then $P_{i} \mathcal{B} \subset \mathcal{B}$, and $\rho(X) P_{i} \psi=P_{i+1(\bmod 2)} \rho(X) \psi$ for all $\psi \in \mathcal{B}$
by item (iii). If $\psi \in C^{\infty}\left(\pi_{0}\right)$ and $\left(\psi_{n}\right)$ is a sequence in $\mathcal{B}$ such that $\psi_{n} \rightarrow \psi$ and $\rho(X) \psi_{n} \rightarrow \overline{\rho(X)} \psi$, then $P_{i} \psi_{n} \rightarrow P_{i} \psi$ and $\rho(X) P_{i} \psi_{n}=P_{i+1(\bmod 2)} \rho(X) \psi_{n} \rightarrow$ $P_{i+1(\bmod 2)} \overline{\rho(X)} \psi$. Thus we have $\overline{\rho(X)} P_{i} \psi=P_{i+1(\bmod 2)} \overline{\rho(X)} \psi$, and the claim follows."
7. p. 227, item (i) in the statement of Proposition 2: Replace "so that $\pi$, as in Proposition (1), is a representation of $\mathfrak{g}$ in $C^{\infty}\left(\pi_{0}\right)$ " with "so that $\pi$, as in Proposition 1, restricts to a representation of $\mathfrak{g}$ in $C^{\omega}\left(\pi_{0}\right)$ ".

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