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Erratum

# Erratum to: Inclusive probability of particle creation on classical backgrounds

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In the published version of this article, formulas (140) and (142) were improperly corrected.

The corrected formulas are as follows:

$$
\det[\bar{\Phi}\Phi^T(1 - \epsilon \tilde{P}^T X \tilde{P} X^\dagger)]
$$
$$
= \det[1 + \epsilon \bar{\Phi}\Phi^T(P^T X \tilde{P} X^\dagger + X P X^\dagger)]
$$
$$
= \det[1 + \epsilon \Phi^T P^T (\Phi^{-1})^T \Psi^\dagger \tilde{P} \Psi + \epsilon \Psi^\dagger P \Psi]
$$
$$
=: \det(1 + \Omega), \tag{140}
$$

$$
\det(1 + \Omega) = e^{\mathrm{Sp}\Omega}\det_2(1 + \Omega)
$$
$$
= e^{\epsilon \mathrm{Sp}(2\Psi^\dagger P \Psi - \Phi^T P^T (\Phi^{-1})^T \Psi^\dagger P \Psi)}\det_2(1 + \Omega), \tag{142}
$$

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