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*Invariant states on Weyl algebras for the action of the symplectic group*

For any number  $h$  such that  $\hbar := h/2\pi$  is irrational, let  $\mathcal{A}_g^h$  be the corresponding Weyl  $*$ -algebra over  $\mathbb{Z}^{2g}$  and consider the ergodic group of  $*$ -automorphisms of  $\mathcal{A}_g^h$  induced by the action of  $Sp(2g, \mathbb{Z})$  on  $\mathbb{Z}^{2g}$ . We show that the only  $Sp(2g, \mathbb{Z})$ -invariant state on  $\mathcal{A}_g^h$  is the trace state  $\tau$ .