

R. Gow. *Further Aspects of the Weil Representation.*

The Weil representation is usually taken to be a representation of the finite symplectic group of odd characteristic, but there is a version that works for the finite unitary groups of all characteristics. By embedding the symplectic group $Sp(2m, q)$ into the unitary group $Sp(2m, q^2)$, we obtain by restriction to $Sp(2m, q)$ a form of Weil representation of degree $q^{2m} - 1$. We intend to describe how this representation decomposes and investigate the associated characters.