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Wan-Yu Tsai* (wanyu@math.umd.edu), 432 Ridge Rd. Apt 8, Greenbelt, MD 20770. *Lift of the trivial representation to a nonlinear cover.* Preliminary report.

Let G be the real points of a simply laced, simply connected complex Lie group, and \tilde{G} be the nonlinear two-fold cover of G . We'll discuss a set of small genuine representations of \tilde{G} , denoted by $\text{Lift}(\mathbb{C})$, which can be obtained from the trivial representation of G by a lifting operator. The representations in $\text{Lift}(\mathbb{C})$ can be characterized by the following properties: (a) the infinitesimal character is $\rho/2$; (b) they have maximal tau-invariant; (c) they have a particular associated variety \mathcal{O} . When G is split, we will show that all representations in $\text{Lift}(\mathbb{C})$ are parametrized by pairs (central character, real form of \mathcal{O}) by examples. (Received February 09, 2014)