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Jean-Louis Tu. *Twisted cohomology for differentiable stacks.*

For a differentiable stack X and $\alpha \in H^3(X, Z)$, we introduce the twisted cohomology $H_c^*(X, \alpha)$. We discuss two important cases: orbifolds and quotient stacks, which correspond to twisted delocalized orbifold cohomology and twisted delocalized equivariant cohomology, respectively. This is a joint work with Jean-Louis Tu. (Received August 06, 2007)