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Nansen Petrosyan* (nanpetro@indiana.edu), 1700 North Walnut Street, Apartment 307,
Bloomington, IN 47404, and **Alejandro Adem, Jianquan Ge and Jianzhong Pan.** *Toroidal
Orbifolds and Cohomology of Semidirect Product Groups.*

By showing the existence of compatible actions we compute the integral cohomology of semidirect product groups $\Gamma = \mathbb{Z}^n \rtimes \mathbb{Z}/p$ by establishing the collapse at E_2 of the spectral sequence associated to their defining extension. As an application we compute the equivariant cohomology of many six-dimensional toroidal orbifolds arising in string theory. (Received January 20, 2007)