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Shukhrat M Usmanov* (shukhrat.usmanov@waldorf.edu), Waldorf University, 106 South 6th Street, Forest City, IA 50436. *Periodic automorphisms of special flows on Lebesgue space and factors of type III_0* . Preliminary report.

In the work we consider a contraction of the periodic automorphism α on the Lebesgue space $\{X, \mu\}$ to a periodic automorphism α_0 of the Lebesgue space $\{Y, m\}$, where the flow $\{S_t\}$ on $\{X, \mu\}$ is a special flow, constructed from the ergodic automorphism T on Lebesgue space $\{Y, m\}$. In the assumption that α and $\{S_t\}$ are commuting for any t , we prove that α_0 and T commute, too. We will use the construction of a contraction α_0 for building of the discrete decomposition of real factors of type III_0 . (Received September 23, 2017)