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Khaled Moham Qazaqzeh* (qazaqzeh@math.lsu.edu), Department of Mathematics, Yarmouk University, Irbid, 21163, Jordan. *The I_p quantum invariant of Periodic 3-manifolds.*

Let p be prime or twice an odd prime. We use the periodicity of the Jones polynomial introduced first by Murasugi to give a congruence that relates the I_p invariant of a periodic 3-manifold and the corresponding invariant of its orbit 3-manifold. This would provide a criterion for the periodicity of 3-manifolds. (Received February 05, 2008)