1083-57-123 Patrick M Gilmer* (gilmer@math.lsu.edu) and Gregor Masbaum. Irreducible factors of modular representations of mapping class groups arising in Integral TQFT.

We find decomposition series of length at most two for modular representations in positive characteristic of mapping class groups of surfaces induced by an integral version of the Witten-Reshetikhin-Turaev SO(3)-TQFT at the p-th root of unity, where p is an odd prime. The dimensions of the irreducible factors are given by Verlinde-type formulas. (Received August 24, 2012)