Multi-Sided Braid Type Subfactors, II

Juliana Erlijman

Abstract. We show that the multi-sided inclusion $R^{\otimes l} \subset R$ of braid-type subfactors of the hyperfinite $\text{II}_1$ factor $R$, introduced in Multi-sided braid type subfactors [E3], contains a sequence of intermediate subfactors: $R^{\otimes l} \subset R^{\otimes l-1} \subset \cdots \subset R^{\otimes 2} \subset R$. That is, every $t$-sided subfactor is an intermediate subfactor for the inclusion $R^{\otimes l} \subset R$, for $2 \leq t \leq l$. Moreover, we also show that if $t > m$ then $R^{\otimes t} \subset R^{\otimes m}$ is conjugate to $R^{\otimes t-m+1} \subset R$. Thus, if the braid representation considered is associated to one of the classical Lie algebras then the asymptotic inclusions for the Jones-Wenzl subfactors are intermediate subfactors.