1035-54-1655 Helen Wong* (hwong@bowdoin.edu), Bowdoin College, Department of Mathematics, 8600 College Station, Brunswick, ME 04011, and Andrew Casson (andrew.casson@yale.edu), Yale University Mathematics Department, PO Box 208283, New Haven, CT 06511. Quantum invariants can provide sharp bounds on Heegaard genus.

Using Seifert fibered examples of Boileau and Zieschang, we demonstrate that the Reshetikhin-Turaev quantum invariants may be used to provide a lower bound on the Heegaard genus which is strictly larger than the rank of the fundamental group. (Received September 20, 2007)