Yongwu Rong* (rong@gwu.edu), Department of Mathematics, The George Washington University, Washington, DC 20052, and Kerry Luse, Department of Mathematics, The George Washington University, Washington, DC 20052. Constructing Links with the Same Invariants.

There have been some well-known constructions to get different links with the same quantum invariants. A particular construction, due to Eliahou, Kauffman, and Thistlethwaite, is a tangle surgery method that yields many examples of links with trivial Jones polynomial. This method was also used by us to produce new examples of links with the same polynomial, generalizing previous well-known examples by Kanenobu. In their new book "Linknot," Slavik Jablan and Radmila Sazdanovic discussed their examples in terms of Conway notation, some related to our examples. In addition, L. Watson has shown that our examples in fact provide many examples of infinitely many different knots with the same Khovanov homology. This talk will discuss these examples and other ideas around them. (Received February 03, 2008)