DROR BAR-NATAN, University of Toronto
Tangles, Wheels, Balloons

I will describe an invariant of tangles with values in wheels, almost generalize it to some balloons, and then tell you why I care. Spoilers: tangles are you know what, wheels are linear combinations of cyclic words in some alphabet, balloons are 2-knots, and one reason I care is because quantum field theory predicts more than I can actually get (but also less).

See also http://drorbn.net/CMS14