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Nathan Geer* (geer@math.gatech.edu). *An Alexander type multi-variable link invariant arising from $sl(2|1)$.*

In this talk I will discuss a quantum group type invariant of links arising from finite dimensional modules of the special linear Lie superalgebra $sl(2|1)$. Most invariants arising from Lie superalgebras are only invariants of long knots or (1,1)-tangles. This is true because, in many cases the super dimension of a finite dimensional module over a Lie superalgebra is zero. This implies that the corresponding link invariant arising from such a module is trivial. For this reason it can be difficult to construct non-trivial link invariants arising from Lie superalgebras. In this talk I will recall the construction of the standard quantum group invariant of links. Then I will discuss how to modify this construction, in the case of $sl(2|1)$, in order to define a non-trivial invariant of links. Finally, I will point out that this new invariant can be used to define an Alexander like multi-variable invariant of links. (Received September 23, 2005)