1046-14-1164   **Sabin Cautis*** (`scautis@math.harvard.edu`), 96 Fifeshire Rd. Apt 501, Toronto, Ontario M2L2X9, Canada. *Towards a geometric categorification of the coloured Reshetikhin-Turaev sl(m) knot invariants.*

To any tangle whose strands are decorated with a representation of sl(m) one can associate its Reshetikhin-Turaev (RT) invariant. In particular, given a knot K one obtains a polynomial knot invariant. Ideally, one would like to assign to K a complex whose (graded) Euler characteristic is the RT invariant of K. This has been done (in more than one way) when the representation is the standard representation of sl(m). We conjecture a way to do this for arbitrary wedge products of the standard representation. This involves studying coherent sheaves on certain flag like varieties and is related to work of Chuang-Rouquier and Khovanov-Lauda. (Received September 14, 2008)