Following a conversation with Turchin - might it be that the right way to frame a virtual knot is to take it along with a homotopy class of paths from it to the unknot?

This is "the homotopy Fiber of the inclusion of embeddings into immensions" Added May 13, 2009: Does This help to explain the "Framing" of KTGs2 Framed -> EM5 Imm

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Take a look at "The Integral Cohomology of the Group of Loops", by Jensen, McCammond and Meier.

What are spun knots? Are they always ribbon?