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Arlington, VA 22202. *Twist Spinning Knotted Trivalent Graphs.*

In 1965, E. C. Zeeman proved that the ± 1 -twist spin of any knot $K \subset S^{n-1}$ is unknotted in S^n . In 1991, Y. Marumoto and Y. Nakanishi gave an alternate proof of Zeeman's theorem by using the moving picture method. In this talk, we define a knotted 2-dimensional foam which is a generalization of a knotted sphere and prove that a ± 1 -twist spin of a knotted trivalent graph is not always unknotted. We then see families of knotted graphs for which ± 1 -twist spinning are always unknotted. We work in the smooth (or piecewise linear) category throughout this talk. (Received August 23, 2013)