998-51-196 Ricardo Francisco Vila-Freyer* (vila@cimat.mx), Cimat, Apdo. Postal 402, Guanajuato, Guanajuato 36000. Gauge Theory and Flows on a Trivalent Graph.Preliminary report.

We construct a Gauge Theory on a trivalent graph following Tyurin, in order to define the Witten invariants for a knot in it. And we also describe the tangent bundle of the graph, to have a flow on it, and describe the Witten invariant for it in a similar way. (Received February 25, 2004)