

1006-57-262

**Fernando J. O. Souza\*** ([fernando-souza@uiowa.edu](mailto:fernando-souza@uiowa.edu)), Department of Mathematics, 14 MLH, University of Iowa, Iowa City, IA 52242. *Non-additive versions of the Hennings (KRH) invariant*. Preliminary report.

The Kauffman-Radford reformulation of the Hennings invariant (KRH invariant) of orientable, closed 3-manifolds is defined via surgery instructions in terms of formal sums involving diagrams and Hopf-algebra objects. We consider and explore variations of that definition, retaining the use of diagrammatic Hopf-algebra objects, but not the assumption that the underlying category is additive. One of our focuses is the study of the relationship between the KRH and other invariants.

Part of the materials to be presented are joint work with Louis Kauffman and David Radford.  
(Received February 16, 2005)