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Robin Hartshorne, Juan Migliore and **Uwe Nagel*** (uwenagel@ms.uky.edu), University of Kentucky, Department of Mathematics, 715 Patterson Office Tower, Lexington, KY 40506. *Liaison addition and the structure of a Gorenstein liaison class.*

This is a report on joint work with R. Hartshorne and J. Migliore.

We study the concept of liaison addition for codimension two subschemes of an arithmetically Gorenstein projective scheme. We show how it relates to liaison and biliaison classes of subschemes and use it to investigate the structure of Gorenstein liaison equivalence classes, extending the known theory for complete intersection liaison of codimension two subschemes. In particular, we show that on the non-singular quadric threefold in projective 4-space, every non-licci ACM curve can be obtained from a single line by successive liaison additions with lines and CI-biliaisons. (Received September 20, 2007)