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Brandon P. Ashley* (brandonpashley@live.com). *Darboux Integrable Systems of Class $s = 2$* . Preliminary report.

Hyperbolic Darboux integrable exterior differential systems of class $s = 0, 1$, and 3 have been extensively studied (Goursat, Vessiot, Sokolov, etc.). In this talk, we present our recent work on the classification of hyperbolic Darboux integrable systems of class $s = 2$. For the equations in our classification, we calculate several geometric features including the Vessiot algebra, generalized symmetries, and zero curvature representations. (Received September 06, 2019)