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**Jing Long Hoelscher\*** (jlong@math.arizona.edu), 617 N. Santa Rita Ave., P.O. Box 210089, Dept. of Math., University of Arizona, Tucson, AZ 85721. *Class numbers of function fields*. Preliminary report.

This talk will concern the divisibility of class numbers and their relation with Bernoulli numbers for function fields of positive characteristic. In number fields, the Herbrand-Ribet theorem gives a precise relation between the divisibility of class numbers and Bernoulli numbers. In function fields, the Herbrand's direction has been proven to be true, but the other direction has obvious counter-examples. Gekeler reformulated a conjecture similar to Ribet's theorem. This talk will report some recent progress towards the Gekeler's conjecture. (Received September 19, 2009)