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David Harbater* (harbater@math.upenn.edu), **Julia Hartmann** and **Daniel Krashen**.

Admissible group actions on curves. Preliminary report.

Let G be a finite group that acts on a curve Y over a field K , and let $X = Y/G$. Let E and F be the function fields of Y and X . We say that the action of G is *admissible* if for some division algebra D over F , the field E is a maximal subfield of D containing F . Using patching, we classify the groups G that have an admissible action with quotient curve X , in the case that $K = k((t))$ with k algebraically closed. This is a geometric analog of a conjecture of Schacher concerning group actions on number fields. (Received September 14, 2008)