1086-16-2319 **David Harbater*** (harbater@math.upenn.edu), Department of Mathematics, University of Pennsylvania, 209 South 33rd Street, Philadelphia, PA 19104-6395, and **Julia Hartmann** (hartmann@matha.rwth-aachen.de) and **Daniel Krashen** (dkrashen@math.uga.edu). *Patching and local-global principles for Brauer groups.*

Using patching methods, local-global principles can be obtained for Brauer groups of function fields of curves over complete discretely valued fields. Over such function fields and related fields (such as two-variable Laurent series fields), this leads to results concerning the period-index problem. Motivated by work of Kato, these methods also lead to local-global principles for analogs of the Brauer group in higher cohomology over function fields as above, with applications to torsors and other structures such as Albert algebras. (Received September 25, 2012)