1017-12-47 Shreeram S Abhyankar* (ram@cs.purdue.edu), Mathematics Department, Purdue University, West Lafayette, IN 47907. Simultaneous surface resolution in quadratic and biquadratic Galois extensions. Preliminary report.

We show that simultaneous surface resolution is always possible in a quadratic extension and if the characteristic is different from two then in every compositum of such extensions. We also construct examples to show that the latter is not always possible if the characteristic is two. This answers some questions raised by Ted Chinburg and David Harbater. (Received February 06, 2006)