1067-12-1991     **Nigel Boston** (`boston@math.wisc.edu`), 303 Van Vleck Hall, 480 Lincoln Drive, Madison, WI 53706, and **Meghan De Witt\*** (`dewitt@math.wisc.edu`), 418 Van Vleck Hall, 480 Lincoln Drive, Madison, WI 53706. *The Inverse Galois Problem with minimal ramification over function fields.*

For many years, efforts have been made to solve the Inverse Galois Problem: Does every finite group G appear as a Galois group over a given field K, with special emphasis placed on the case where K is the rational numbers. We are interested in exploring what type of ramification can be expected for a given group and field, and discovering if there is some way to classify what the minimal ramification will be for a G extension of a given field K, specifically when K is a function field. We cover several cases of this situation, both theoretical and computational, and provide evidence of a conjecture that will cover the general case. (Received September 22, 2010)