

1081-11-398 **Zhiwei Yun*** (zyun@math.mit.edu), 77 Massachusetts Avenue, Room 2-173, Cambridge, MA
02139. *Geometric Langlands and the inverse Galois problem.*

The Inverse Galois Problem concerns with realizing a particular finite group as a Galois group of some extension of \mathbb{Q} . We will show how to solve this problem for certain exceptional Lie type groups (such as $E_8(p)$) using ideas from automorphic forms and geometric Langlands. (Received February 14, 2012)