1077-20-902 **Stephen Majewicz*** (smajewicz@kbcc.cuny.edu), Mathematics Dept., Kingsborough Community College, 2001 Oriental Blvd., Brooklyn, NY 11235. *Quantum Algorithms for Fixed Points and Invariant Subgroups.*

In this talk, I will discuss how to use Grover's quantum search algorithm to solve problems concerning fixed points and invariant subgroups of automorphisms. This is joint work with Marianna Bonanome. (Received September 14, 2011)