

1014-Z1-1509 **Peter Schallot*** (pxsch45@sru.edu), 123 Stoughton Beach, Slippery Rock, PA 16057. *On the Nash Equilibrium Theorem*. Preliminary report.

The Nash Equilibrium Theorem asserts that if Γ is a finite non-cooperative game, then there exists at least one equilibrium situation in the mixed extension of the game Γ . John Nash proved the theorem in 1951. In 1994 he was awarded the Nobel Prize in economics for the impact it had on the development of economical theories. We would like to present a new and quite elementary proof of Nash's theorem. (Received September 28, 2005)