

1114-20-115 **Jennifer Elder***, arwenu@mail.fresnostate.edu. *The Futurama Theorem*. Preliminary report.

A popular episode of the TV show Futurama features a machine that will swap the brains of two people. The problem is, the machine will only work once for any pair of characters. After a series of swaps that thoroughly mixes up the crew and their friends, they decide that they must resort to using Math to fix their mess. Episode author Ken Keeler created this problem specifically for the show, but when you reduce the problem to functions it becomes a very interesting problem in Abstract Algebra. In this talk, we will cover two methods to solve the problem created in the show, as well as the start of our work to generalize the problem from a two-person machine, to a k-person machine. (Received August 17, 2015)