

1116-20-1577 **Jennifer Elder***, arwenu@mail.fresnostate.edu, Fresno, CA 93720. *Generalizations of The Futurama Theorem*. Preliminary report.

What if there was a machine that could switch the brains of two people, but couldn't swap them back? Ken Keeler created this puzzle specifically for the TV show Futurama, and solved it using Abstract Algebra. In this talk, we will present a new proof for Keeler's Theorem, as well as a generalized solution to the problem involving a machine that swaps k people at a time. (Received September 20, 2015)