

1051-37-181

Judy Anita Kennedy* (kennedy9905@gmail.com), Dept. Mathematics, PO Box 10047, Lamar University, Beaumont, TX 77710, and **Barry Peratt**, Dept. Mathematics, Winona State University, Winona, MN. *The topology of tank stirring*. Preliminary report.

We consider simple, discrete maps, which when combined, mimic stirring in a tank with a recycle loop as the combined maps are iterated. We have both rigorous and computational results that we will discuss. (Received August 24, 2009)