1047-57-78 **J Scott Carter*** (carter@jaguar1.usouthal.edu), Department of Mathematics and Statistics, Mobile, AL 36688. *An Explicit Eversion of the 2-sphere.*

Several excellent eversions exist in the literature. Many of these are constructed by a clever observation: Outside-In depends on the belt trick; the optiverse depends on perturbing an energy functional; the Froisart-Morin eversion depends on the symmetry at the quadruple point. In this talk, I will illustrate an eversion that I constructed with Sarah Gelsinger, a former graduate student, using only the movie moves of C., Saito, and Reiger. It explicitly involves considerations about the fold set of the projection into the plane, and it is asymmetric at the quadruple point.

Its advantage is that each step is described as a movie of immersed curves while successive steps differ by a unique codimension 1 singularity. The critical set, double point set, fold set, etc are all describe explicitly. It renders itself as one of the more simple eversions in that the fold set is an annulus and at any stage fewer than 4 cusps appear in the projection. (Received January 15, 2009)