1087-05-165 **Stefan H.M. van Zwam*** (svanzwam@math.princeton.edu), Fine Hall, Washington Road, Princeton, NJ 08544-1000. *On inequivalent representations.* Preliminary report.

A fascinating, and sometimes frustrating, phenomenon in matroid theory is the fact that genuinely different point configurations in a projective space can still exhibit exactly the same combinatorial properties. Here "genuinely different" means that no projective transformation can turn one configuration into another, and "combinatorial properties" mean that the associated matroids are identical.

The key to controlling this behavior seems to be the notion of connectivity of a matroid. In this talk I will discuss some recent progress in this area. (Received December 03, 2012)