1176-20-220   **Tom Braden** (`braden@math.umass.edu`) and **Carl Mautner*** (`carlm@ucr.edu`). *Symmetric products of the plane, symmetric groups and perverse sheaves.* Preliminary report.

In joint work with Tom Braden we give a complete description of categories of perverse sheaves (with coefficients in any field) on symmetric products of the plane. In particular, using the geometry of the Hilbert scheme of points, we relate these categories to the symmetric group and its representation ring. Our work is motivated by analogous structure appearing in the Springer resolution and Hilbert-Chow morphism. (Received January 24, 2022)