The concept of manifold is one of the most influential in modern mathematics. In both algebraic and differential geometry major efforts have been made to understand the structure of manifolds of Fano type, which are basic building blocks for those defined by polynomials. I will focus on a third and less explored direction, that investigates this class from the point of view of topology. In particular, I will describe a research program aimed at computing generators for the Fukaya category of Fano manifolds with global symmetries, which leads to a rough classification of their Lagrangian submanifolds.