

In this talk, I will report on a joint project with Giovanni Mongardi. We began the study of automorphisms of the two sporadic deformation classes of irreducible symplectic manifolds introduced by O'Grady. In particular, we determined the subgroup of automorphisms acting trivially on the second cohomology group. Since the geometry of O'Grady's manifolds is less known, I will try to complement my report by recalling the corresponding results on Hilbert schemes of points and their deformations.