We study rational 4-manifolds and its symplectomorphism group. Analogous to the 2-dimensional case, one can think about the symplectic Torelli group and symplectic mapping class group, where the former is the subgroup of the symplectomorphism group fixing homology and the latter is the symplectomorphism group mod symplectic isotopy. We’ll show how the symplectic mapping class groups of rational 4-manifolds are related to braid groups. McDuff-Salamon also asked whether the Torelli symplectomorphism of any rational 4-manifold is smoothly isotopic to identity, and we answer it in the positive. (Received August 18, 2019)