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Hyperkahler varieties of Kummer type and torsion points of abelian surfaces

In this talk, I will describe the geometry of part of the middle cohomology of some hyperkahler varieties of Kummer type and the Galois action on it. I will then discuss how these results can be applied to find abelian surfaces whose generalized Kummer 4-folds are not derived equivalent, over a ground field of Q, to the generalized Kummer 4-folds of their duals.