Justin Sawon\* (sawon@email.unc.edu), Department of Mathematics, University of North Carolina, Chapel Hill, NC 27599-3250. On the topology of compact hyperkähler manifolds.

In this talk we will describe some results about Betti, Hodge, and characteristic numbers of compact hyperkähler manifolds. In (complex) dimension four one can find universal bounds for all of these invariants (Beauville, Guan); in higher dimensions it is still possible to find some bounds. We also describe how these bounds are related to the question: are there finitely many hyperkähler manifolds in each dimension, up to deformation? (Received January 04, 2016)