Construction methods for compact hyperkähler manifolds

Manfred Lehn

Universität Mainz, Germany lehn@mathematik.uni-mainz.de

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Most constructions for compact hyperkähler manifolds are based on moduli of sheaves on K3 surfaces or moduli of curves on cubic fourfolds. The talk intends to present an overview of existing constructions, recent developments and the relation between the two mentioned constructions.