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Chunyi Li, Laura Pertusi* (laura.pertusi@unimi.it) and **Xiaolei Zhao**. *Elliptic quintics on cubic fourfolds, O'Grady 10 and Lagrangian fibrations.*

In this talk we study certain moduli spaces of semistable objects in the Kuznetsov component of a cubic fourfold. We show that they admit a symplectic resolution \tilde{M} which is a smooth projective hyperkaehler manifold deformation equivalent to the 10-dimensional example constructed by O'Grady. As a first application, we construct a birational model of \tilde{M} which is a compactification of the twisted intermediate Jacobian of the cubic fourfold. Secondly, we show that \tilde{M} is the MRC quotient of the main component of the Hilbert scheme of elliptic quintic curves in the cubic fourfold, as conjectured by Castravet. This is a joint work with Chunyi Li and Xiaolei Zhao. (Received August 13, 2020)