

The object of this talk is the construction of a family of hyperkahler fourfolds of $K3^2$ -type producing an example of the last missing case in the classification of non symplectic involutions. We will see that these varieties can be described geometrically in two different ways, as moduli spaces of twisted sheaves on K3 surfaces and as double covers of EPW quartics. This is joint work with G. Kaputcka, M. Kaputcka et G. Mongardi.