

Holomorphic symplectic geometry of elliptic surfaces

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Abstract: When a complex surface X admits a nowhere vanishing holomorphic 2-form, it determines a (holomorphic) symplectic structure on X . We consider the case when X is an elliptic surface and study how the symplectic geometry is related to the underlying complex geometry of the elliptic fibration. This is based on a joint work with Guolei Zhong.