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*Eichler-Shimura and extensions of Hodge structures*

Given a flat family of elliptic curves parametrized by a projective curve  $T$ , Peter Stiller associated to every element of the field  $K(T)$  a second order differential equation which is related to an extension of Hodge structures. Particularly interesting is the case when  $T$  is itself an elliptic curve.

We are interested in understanding the extensions of Hodge structures that arise in a similar fashion for flat families of Calabi-Yau varieties parametrized by Shimura varieties.