

# Classifying space of Hodge structures and Modular foliations

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In this talk we construct an analytic variety  $U$  and an action of an algebraic group  $G_0$  on  $U$  from the right such that  $U/G_0$  is the moduli space of polarized Hodge structures of a fixed type. The space  $U$  lives over the so called Griffiths domain and has the advantage that it carries certain modular foliations. The hope is that  $U$  has a canonical structure of an algebraic variety such that the action of  $G_0$  is algebraic and the corresponding modular foliations are of geometric origin.