

Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich **Departement Mathematik**

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Number Theory Seminar

Special subvarieties of moduli stacks (joint work with Eckard Viehweg)

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ABSTRACT: I will talk on some recent results (with Eckart Viehweg) on "minimal" subvarieties of moduli stacks of projective manifolds. Here minimality is defined by so-called Arakelov type equalities for numerical invariants of the universal variation of Hodge structures. For the moduli stack \mathcal{A}_g of Abelian varieties, a "minimal" curve is precisely a Shimura curve (up to some Hecke translations). This result carries over to other moduli stacks. For higher dimensional subvarieties we just have some partial results. If the time permits I will also discuss problems concerning varieties containing a big set of minimal subvarieties.

Date: Friday, 05.01.2007 at 14.15pm

Place: HWZ (HG G43)

G. Wüstholz