



Minisymposium 21 - Automorphic forms and their applications

Locally symmetric divisors in locally symmetric varieties

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A locally symmetric variety that possesses a locally symmetric divisor is either a ball quotient or of orthogonal type (IV in the Cartan classification). In algebraic geometry, one often encounters the situation that certain algebraic objects (varieties, usually) are parameterized by a locally symmetric variety as above and that the degenerate objects are parameterized by a locally symmetric divisor. After giving some examples we shall explain why it is that the degeneracy locus tends to be like this. We also go into the question of when such a divisor is definable by an automorphic form.