

报告人：王好武，武汉大学

题目：Singular automorphic products and Lie algebras

摘要：Singular automorphic products are modular forms of minimal weight that have infinite product expansions at cusps. In this talk we will discuss some relations between such functions and Lie algebras in two cases. We first introduce a one-to-one correspondence between Jacobi forms and affine Lie algebras. We then explain some new relations between modular forms on $O(n,2)$, Borcherds-Kac-Moody Lie algebras and vertex operator algebras, motivated by the famous moonshine conjecture and its proof.

报告人：薛江维，武汉大学

题目：Divisibility of class or type numbers of totally definite quaternion orders and selectivity

摘要：The notion "selectivity" is first introduced by Chinburg and Friedman in 1999 to describe the phenomenon that certain quadratic orders tend to embed into some but not all maximal orders in a fixed indefinite quaternion algebra, as if they have selected some maximal order to embed into. In this talk, we explain the generalization of the selectivity theory to the totally definite case and then apply it to obtain several refined class/type number formulas for totally definite quaternion orders. Such formulas enable us to prove certain divisibility results about these class/type numbers. This talk is based on joint works with Yucui Lin and Chia-Fu Yu.