## 2023年度 第1回 数理科学 談話会のお知らせ

下記の要領で「2023年度 第1回 数理科学 談話会」を開催致します。

記

日 時:2023年4月19日(水)13:00~14:00

場 所:弘前大学理工学部 2 号館 2 階 第 11 講義室

講演者: Ching Hung Lam 氏 (Institute of Mathematics, Academia Sinica, 台湾)

題 目:Automorphism groups of cyclic orbifolds of lattice VOA

概 要: Let V be a vertex operator algebra (VOA) and  $g \in \text{Aut}(V)$  a finite automorphism of V. The fixed point subset  $V^{\langle g \rangle} = \{x \in V \mid gx = x\}$  is a vertex subalgebra of V and is often called a cyclic orbifold of V. In this talk, we will discuss some general methods for computing the full automorphism groups of cyclic orbifolds of lattice VOA.

It is clear that  $N_{\operatorname{Aut}(V)}(\langle g \rangle)$  acts on the fixed point space  $V^{\langle g \rangle}$ . Therefore, the main question is to determine if there are automorphisms which are not induced from  $N_{\operatorname{Aut}(V)}(\langle g \rangle)$ . We will discuss a method to construct such kinds of "extra" automorphisms for lattice VOAs and discuss some situations when "extra" automorphisms exist.

It turns out that many interesting cases are related to the famous Leech lattice.

- ※講演は英語で行われます。
- ※講演後の質問は英語でも日本語でも構いません。
- ※談話会終了後の懇親会は予定しておりません。