

***LIFTING DERIVED EQUIVALENCES OF ABELIAN SURFACES TO
GENERALIZED KUMMER VARIETIES***

Speaker: Yuxuan Yang
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Time: Tue., Dec. 30th, 14:00-15:00

Venue: Room 102, SCMS

Abstract: In this talk, we study the SG -autoequivalences of the derived category $D^b_G(A)$ of SG -equivariant objects for an abelian variety A with SG being a finite subgroup of $\mathrm{Pic}^0(A)$. We provide a result analogue to Orlov's short exact sequence for derived equivalences of abelian varieties. It can be generalized to the derived equivalences for a same SG in general. Furthermore, we find derived equivalences of generalized Kummer varieties by lifting derived equivalences of abelian surfaces using the SG -equivariant version of Orlov's short exact sequence and some "splitting" propositions. The talk is based on the paper <https://arxiv.org/abs/2507.11358>.