



Seminar/Talk

Mirror symmetry for generalized Kummer varieties

Justin Sawon

University of North Carolina

Host: Tamas Hausel

The generalized Kummer variety K_n of an abelian surface A is the fibre of the natural map $\text{Hilb}^{n+1}A \rightarrow \text{Sym}^{n+1}A \rightarrow A$. Debarre described a Lagrangian fibration on K_n whose fibres are the kernels of $\text{Jac}C \rightarrow A$, where C are curves in a fixed linear system in A . A different (isotrivial) Lagrangian fibration on K_n arises when A is the product of elliptic curves. In this talk we consider the dual Lagrangian fibrations. The dual of the Debarre system is constructed in a similar way to the duality between SL - and PGL -Hitchin systems described by Hausel and Thaddeus, and in a few cases we are able to verify topological mirror symmetry', i.e., equality of (stringy) Hodge numbers of the Debarre fibration and its dual. The dual of the isotrivial fibration is easier to describe and we can verify topological mirror symmetry in many more cases. Finally, we speculate on how to enhance this to homological mirror symmetry'.

Thursday, March 23, 2023 01:00pm - 03:00pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.