

1136-14-330

**Eric Katz\*** ([katz.60@osu.edu](mailto:katz.60@osu.edu)), 231 W. 18th Ave., Columbus, OH 43210. *Curve Arrangements on Surfaces and the Hodge Index Theorem.*

Given a surface, one can ask which possible combinatorial arrangement of curves on it are possible. We will explain how the Hodge index theorem constrains the combinatorics of an abstract tropicalization of the curve arrangement. (Received January 19, 2018)