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**Lei Song\*** ([lsong@ku.edu](mailto:lsong@ku.edu)), 405 Snow Hall, 1460 Jayhawk Blvd., Lawrence, KS 66045. *On the projective normality of cyclic coverings over a rational surface.*

A conjecture of Mukai says that for any smooth projective complex surface  $X$ , and an ample line bundle  $A$  on  $X$ , the adjoint line bundle  $\omega_X \otimes A^k$  is normally generated for every integer  $k \geq 4$ . The conjecture is quite open for surfaces of general type and non-minimal surfaces. We verify the conjecture in the case that  $X$  is a branched cyclic covering over a rational surface  $S$  with the anticanonical linear system moves and  $A$  is the pullback of an ample line bundle on  $S$ . (Received December 12, 2016)