

GENERIC STRANGE DUALITY FOR ABELIAN SURFACES

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ABSTRACT. Le Potier conjectured an unexpected duality between the complete linear series of certain natural divisors, called Theta divisors, on moduli spaces of sheaves on a surface. Such conjecture is widely known as Strange Duality conjecture. After the results of Marian and Oprea, who proved generic Strange Duality for sheaves on K3 surfaces, I will work in the setting of abelian surfaces. First, I will describe the geometric setup, including the moduli space, the Theta divisors and their relative version giving rise to the Verlinde sheaves. I will then present the duality in this setting and, time permitting, I will sketch its proof. This is joint work with A. Marian, D. Oprea and K. Yoshioka.