

*In 2020, Ichiro Shimada and Davide Cesare Veniani gave a formula to compute the number of isomorphism classes of Enriques surfaces that are doubly covered by a K3 surface with a given transcendental lattice. In the same paper, they apply this formula to singular K3 surfaces with small discriminant.*

*In this talk, we apply the formula to K3 surfaces  $X$  with Picard number 19 and  $|\det T_X| < 16$ , where  $T_X$  is the transcendental lattice of  $X$ .*

*We compute the number of and study the isomorphism classes of Enriques surfaces that are doubly covered by  $X$ .*

*This is joint work with D. Veniani.*