

# Seminario di Geometria

Giovedì 9 Giugno 2022, ore 14:15

AULA A

Dipartimento di Matematica e Fisica  
Università degli studi Roma Tre  
Via della Vasca Navale 84

Speaker: Prof. Lars Halvard Halle (Bologna)

Titolo: *On log good reduction of  $K3$  surfaces admitting a triple-point-free model*

Let  $X$  be a proper smooth variety over a complete discretely valued field  $K$ . One says that  $X$  has log good reduction if it admits a log smooth and proper model over the ring of integers of  $K$ . In general, it is quite non-obvious whether or not such a model exists.

If  $X$  is a curve, there is a neat criterion (due to T. Saito and J. Stix) in terms of the geometry of a suitable normal crossings model of  $X$ . In my talk, I will present a geometric criterion for log good reduction when  $X$  is a  $K3$  surface admitting a triple-point-free model. This is joint work in progress with J. Nicaise.