

**Speaker:** Ciaran Schembri

**Title:** Torsion points on abelian surfaces with many endomorphisms

**Abstract.** In a celebrated work Mazur classified which torsion subgroups can occur for elliptic curves defined over the rationals. A natural analogue is to consider surfaces with geometric endomorphisms by a quaternion order, since the associated moduli space is 1-dimensional. In this talk I will discuss progress towards classifying which torsion subgroups are possible for these surfaces.

**N.B.** This is joint work with Jef Laga, Ari Shnidman and John Voight.