## Marco Marengon and Stefan Mihajlović

## Title: Unknotting number 21 knots are slice in K3

Abstract: A question in knot theory that has become very popular recently is to classify what knots bound a smooth disc in $X-\operatorname{int}\left(B^{4}\right)$, where $X$ is a given closed 4-manifold. We study the case when $X$ is the $K 3$ surface, and prove that every knot that can be unknotted with at most 21 crossing changes, bounds a smooth disc in $K 3-\operatorname{int}\left(B^{4}\right)$. Our proof is constructive and based on the existence of a plumbing tree of 22 spheres in $K 3$. We present a simple but flexible technique to simultaneously remove multiple singularities of immersed surfaces in 4-manifolds.

