

On tame ramification and F-singularities

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I'll introduce a notion of tame ramification for general finite covers. In the separable case, it extends to higher dimensions the classical notion of tame ramification for Dedekind-domains/curves and sits nicely in between other notions of tame ramification in arithmetic geometry. However, when applied to the Frobenius map, it yields the notion of center of F-purity, which is arguably the most important notion in F-singularity theory. As an application, I'll describe how centers of F-purity behave under finite covers. My talk is based on joint work with Anne Fayolle (UUtah) <https://arxiv.org/abs/2308.02660>.