Publications

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1. **Torsion Subgroups of Elliptic Curves over Function Fields of Genus 0** (2017)
   in Journal of Number Theory Volume 193
   preprint available at https://mathrjsm.com/#research

   Abstract: *Let $K = \mathbb{F}_q(T)$ be the function field of a finite field of characteristic p, and E/K be an elliptic curve. It is known that $E(K)$ is a finitely generated abelian group, and that for a given p, there is a finite, effectively calculable, list of possible torsion subgroups which can appear. For $p \neq 2, 3$, a minimal list of prime-to-p torsion subgroups has been determined by Cox and Parry. In this article, we extend this result to the case when $p = 2, 3$, and determine the complete list of possible full torsion subgroups which can appear, and appear infinitely often, for a given p.*

2. **Torsion Subgroups of Elliptic Curves over Function Fields of Genus 1**
   (2019, submitted)
   for a current (rough) draft, see https://mathrjsm.com/#research

   Abstract: *Let $k = \mathbb{F}_q$ be a finite field of characteristic p, and $\mathcal{C}$ be a smooth, projective, absolutely irreducible curve of genus one over k. Let $K = k(\mathcal{C})$, and E be a non-isotrivial elliptic curve over K. Then, $E(K)$ is a finitely generated abelian group, and there is a finite list of possible torsion subgroups which can appear that depends only on $\mathcal{C}$ and p. In this article, we build on previous work to determine a complete list of possible full torsion subgroups which can appear over K.*