



# Representations of Rational Cherednik Algebras in Positive Characteristic

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We study rational Cherednik algebras over an algebraically closed field of positive characteristic. We first prove several general results about category  $\mathcal{O}$ , and then focus on rational Cherednik algebras associated to the general and special linear group over a finite field of the same characteristic as the underlying algebraically closed field. For such algebras we calculate the characters of irreducible representations with trivial lowest weight.

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