On compact Riemann surfaces and hypermaps of genus $p+1$ where p is prime

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In this talk we shall discuss a classification of compact Riemann surfaces of genus g, where $g-1$ is a prime p, which have a group of automorphisms of order $\rho(g-1)$ for some integer $\rho \geqslant 1$. We also provide isogeny decompositions of their Jacobian varieties. As a consequence, a classification of orientably regular hypermaps of genus $p+1$ with automorphism group of order divisible by the prime p is obtained.