A quasigroup \((Q, \cdot)\) is a set equipped with a (non)associative binary multiplication that satisfies the Latin square property. A quasigroup \((A, \cdot)\) is said to be \(\mathbb{Z}\)-linear if \((A, +, 0)\) forms an abelian group and \(x \cdot y = \rho(x) + \lambda(y)\), where \(\rho, \lambda\) are automorphisms of the underlying abelian group. This talk will discuss isomorphism invariants for permutation representations of a class of \(\mathbb{Z}\)-linear quasigroups. (Received September 17, 2019)