THE REPRESENTATION THEORY OF THE FINITE AND INFINITE TEMPERLEY-LIEB ALGEBRAS

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ABSTRACT. The Temperley-Lieb algebras are a family of finite dimensional algebras that are quotients of the symmetric group algebras, or more generally the Iwahori-Hecke algebras. They appear in a number of areas of mathematics, including statistical mechanics, knot theory, quantum groups, and subfactors. We will review their representation theory and give some results on an infinite dimensional generalization.