1116-16-2665 **David Julian Steinberg*** (dsteinbe@uoregon.edu), 1210 W 28th Avenue, Eugene, OR 97405.

Homomorphisms Between Standard Modules of KLR Algebras.

Khovanov-Lauda-Rouquier algebras are a family of algebras which have been shown to categorify the quantized enveloping algebra of a semisimple Lie algebra. KLR algebras come with families of standard modules, which under this categorification correspond to PBW-bases of the positive part of the corresponding quantized enveloping algebra. These standard modules may be viewed as analogues of the Verma modules of semisimple Lie algebras, as they share many of their nice homological properties. A well known result on Verma modules states that every homomorphism between Verma modules is injective. In this talk, the speaker presents a more recent result of the speaker and his advisor, Alexander Kleshchev, in which they prove that there are no non-zero homomorphisms between distinct standard modules of KLR algebras of finite Lie type and that all non-zero endomorphisms of a standard module are injective. (Received September 22, 2015)