Abstract

For an affine Weyl group W of type B_3, we show that Lusztig's conjecture on the structure of the based ring of the two-sided cell corresponding to the unipotent class in Sp_6(C) with 3 equal Jordan blocks needs modification. And we compute the based rings of the other two-side cells in W to verify Lusztig's conjecture. Moreover, we give two possible modifications. This is a joint work with Nanhua Xi.