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**Pavlo Pylyavskyy**. *Two-row  $W$ -graphs in affine type  $A$ .*

For a Coxeter group  $W$ , a  $W$ -graph is a graph satisfying certain combinatorial axioms. It yields a good basis of the corresponding representation and describes the action of  $W$  on the basis elements concretely. Therefore, understanding the structure of  $W$ -graphs is useful for investigating properties of the representations of  $W$ , even when  $W$  is finite and its irreducible characters are known. In this session, I will discuss  $W$ -graphs when  $W$  is an (extended) affine symmetric group (which is an infinite group) and these graphs are associated with “two-row partitions”. Also I will briefly mention how it is related to Lusztig’s periodic  $W$ -graphs. This work is joint with Pavlo Pylyavskyy. (Received August 28, 2020)