1077-17-1443 Valerio Toledano Laredo* (v.toledanolaredo@neu.edu), 360 Huntington Ave, Boston, MA 02115. Yangians, quantum loop algebras and trigonometric connections.

I will describe monodromy representations of affine braid groups arising from a flat connection with values in the Yangian of a simple Lie algebra g. These representations are related to those arising from the quantum Weyl group operators of the quantum loop algebra of g. Matching these two classes of representations involves in particular the construction of a functor relating finite-dimensional modules of those two quantum groups.

This is based on joint work with Sachin Gautam. (Received September 19, 2011)