1108-82-342   **David Damanik**, damanik@rice.edu, **Milivoje Lukic***, mlukic@math.toronto.edu, and **William Yessen**, yessen@rice.edu. *Ballistic transport in the XY spin chain.*

Dynamical properties of spin chains are usually expressed in terms of Lieb-Robinson bounds. In particular, the anisotropic XY spin chain can be studied via an associated block Jacobi matrix, using the Jordan-Wigner transform. We use this connection to prove ballistic propagation, i.e. a nonzero lower bound on the Lieb-Robinson velocity, for the periodic XY spin chain, and some related results. (Received January 18, 2015)