

Abstract: This talk explores how braid groups encode maps from spheres to other natural spaces. One example which is given by elementary "cabling of braids" encodes information about maps from n -sphere, $n > 1$, to the 2-sphere. An overview of these structures, as well as connections to Vassiliev invariants of pure braids and associated Lie algebras of Drinfel'd-Kohno will be given. This talk is based on joint work with J. Berrick, Y.-L. Wang, and J. Wu.