Weiqiang Wang* (ww9c@virginia.edu). Divided powers arising from quantum symmetric pairs.

A theory of canonical bases arising from quantum symmetric pairs has recently been developed by Bao and Wang, generalizing the canonical bases of Lusztig and Kashiwara. We shall describe the rich q-combinatorics of the new divided powers (which are the simplest new canonical basis elements) in sl(2) case. In this case, these divided powers are also known to admit geometric interpretation. This is based in part on joint work with Collin Berman (undergraduate at Virginia), and also on earlier works with Huanchen Bao (IAS), Yiqiang Li (Buffalo). (Received February 06, 2017)