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Huanchen Bao* (hb4tb@virginia.edu), 141 Cabell Drive, Kerchof Hall, Charlottesville, VA 22904. *Canonical bases arising from quantum symmetric pairs.*

The canonical bases of quantum groups have been discovered by Lusztig twenty years ago and they have played an important role in representation theory. Recently, motivated by a new formulation of a Kazhdan-Lusztig theory of (super) type B, Weiqiang Wang and I initiated a theory of canonical bases arising from quantum symmetric pairs. There has also been further geometric construction of such canonical bases (joint with Yiqiang Li and Jon Kujawa). In this talk, I will describe the construction of these canonical bases and some further development if time permitting. (Received January 14, 2015)