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**Anders Buch\***, asbuch@math.rutgers.edu, and **Pierre-Emmanuel Chaput, Leonardo Mihalcea** and **Nicolas Perrin**. *A Pieri rule for the quantum K-theory of maximal orthogonal Grassmannians*. Preliminary report.

The quantum K-theory ring of a flag variety is a generalization of the quantum cohomology ring that encodes the arithmetic genera of Gromov-Witten varieties in its structure constants. I will speak about a Pieri formula that makes it easy to do computations in the quantum K-theory of maximal orthogonal Grassmannians. This formula is derived from an existing Pieri formula for the ordinary K-theory ring, as well as a new result showing that the fundamental group of  $\text{Aut}(X)$  acts on the quantum K-theory of  $X$  when  $X$  is any cominuscule flag variety. This is joint work with Chaput, Mihalcea, and Perrin. (Received January 19, 2021)