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Naihuan Jing* (jing@ncsu.edu), Dept of Mathematics, N. C. State University, Raleigh, NC 27695-8205, and **Jian Zhang**, School of Mathematical Sciences, South China Univ. of Technology, Guangzhou, Guangdong 510640, Peoples Rep of China. *Quantum determinants and quantum Pfaffians.*

We use quantum exterior algebras to give a new and elementary formulation of quantum Pfaffians and generalized quantum Pfaffians based on quantum Pluecker relations. In this approach, the quantum Pfaffians are for any square matrix satisfying a simple quadratic relation. In particular, we prove the fundamental identity expressing any quantum determinant as a quantum Pfaffian. (Received January 14, 2015)