Quantum integrability and quantum Schubert calculus

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Quantum cohomology arose from fusion rings through the works of Gepner, Vafa, Intriligator and Witten. In this talk I will give an overview of a recent formulation of the fusion rings for the type A case which employs quantum integrable lattice models. This formulation shows new connections between these rings and Lie theory and provides a simple combinatorial formalism to compute Gromov—Witten invariants by using a hopping algorithm for particles on a discrete circular lattice.