The notion of a “curve neighborhood” of a Schubert variety in a finite flag manifold, studied recently by A. Buch and the speaker, has a natural generalization to affine flag manifolds $X$. In analogy to the finite case, one can define an “affine quantum Chevalley” rule, i.e. a multiplication of a Schubert class in the cohomology ring of $X$ by a Schubert class of (complex) degree 1. This product deforms the usual product of Schubert classes in the cohomology ring of $X$, it coincides with one conjectured earlier in type A by M. Guest and T. Otofuji, but it is only associative modulo a product of (affine) quantum parameters. However, we can still define a ring which deforms the quantum cohomology ring of the finite dimensional flag manifold, and, analogous to a result of B. Kim, it has a presentation with the ideal of relations generated by the conserved quantities in the periodic Toda lattice. This is joint work with Liviu Mare. (Received September 17, 2013)