

1145-57-982

**Oleg Viro\*** ([oleg.viro@gmail.com](mailto:oleg.viro@gmail.com)), Mathematics Department, Stony Brook University, Stony Brook, NY 11794. *Crystal colorings of framed graph diagrams and categorifications*. Preliminary report.

Some vertex state sum formulas which represent a quantum invariant look like sums over colorings of a planar diagram with elements of crystal bases of the representations which define the invariant. The summands can be used as generators of the complex that provides a categorification for the invariant. This approach gives the Khovanov homology as a categorification of the Jones polynomial. In the talk it will be applied to construct categorifications of other invariants. (Received September 17, 2018)