Quantum Topology Seminar

An elementary introduction to Khovanov-Lipshitz-Sarkar stable homotopy type

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Abstract: I will give an elementary introduction to Khovanov-Lipshitz-Sarkar stable homotopy type.

The graded cohomology of Khovanov-Lipshitz-Sarkar stable homotopy type for a link is Khovanov homology of the link. Khovanov-Lipshitz-Sarkar stable homotopy type is stronger than Khovanov homology as link invariants.

I will explain an outline of the idea of Khovanov-Lipshitz-Sarkar stable homotopy type mainly.

Khovanov-Lipshitz-Sarkar stable homotopy type is generalized by Kauffman-Ogasa, and by Kauffman-Nikonov-Ogasa.

Kauffman-Nikonov-Ogasa: Khovanov-Lipshitz-Sarkar homotopy type for links in thickened higher genus surfaces arxiv2007.09241[m

Kauffman-Ogasa: Steenrod square for virtual links toward Khovanov-Lipshitz-Sarkar stable homotopy type for virtual links arXiv:2001.07789[math.GT]

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