DECORATED BRAIDS: A STEP FORWARD

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Classical and virtual braids are well-known and reasonably well understood objects. But, as with any geometrically-combinatorial objects shown with diagrams, a natural idea arises: can we somehow decorate a braid (be it a classical, virtual or any other kind) with additional structures thus encoding more information than a simple diagram allows?

Using parity techniques devised by V. O. Manturov several such constructions were obtained. Notably, G-braids (with G standing for an arbitrary group) and dotted braids were constructed and studied.

The results obtained can be viewed as a step to better understanding G_n^k braids as well as to tackling the problem of conjugation in classical braids.

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