The MVA and Polynomiality

MVA := The Multi-Variable Alexander polynomial.
SVA := The Single Variable Alexander polynomial.

Everything is measured with the number of crossings as the complexity parameter.

- Is the MVA computable in polynomial time? Every evaluation thereof at fixed rational numbers is, and so is every reduction thereof to a fixed number of variables. But is the whole thing poly-time computable? (The SVA is poly-time computable no questions asked).
- **Main Question:** Is there an extension of the MVA to tangles (in the circuit- or planar algebra sense) which composes well and that can be computed in poly-time?
- Same question, for the SVA. (Known for braids - this is Burau).
- Same question, for the MVA evaluated at specific rational numbers.

I think I can do better than Turaev-Cimasoni, Kirk-Livingston-Wang, etc., in the sense that I have a poly-time invariant of open tangles (only in specific evaluations) which is well behaved under compositions and from which the invariants of closures can be computed. Yet I don't understand algorithmically the last step of "closure".