Calculating the Index of Poset Algebras

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The index of a Lie algebra is an important algebraic invariant which is usually quite difficult to compute. Recently, there has been a push to find closed-form formulas for the index of families of Lie algebras which are combinatorially defined. Much of this work is related to what are known as Seaweed algebras which are subalgebras of sl(n) which can be parametrized by a pair of compositions of n. In this talk I will discuss some recent work related to finding combinatorial formulas for the index of a different family of Lie algebras which are defined via posets.