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Explicit formulas for the Multiplicities of Some Irreducible Components of $(GL_\infty) - \mathbb{S}_n$ -Modules of Coinvariants.

For François Bergeron's multivariate generalization of Garcia and Haiman's \mathbb{S}_n -diagonal coinvariant space is a $(GL_\infty) - \mathbb{S}_n$ -Modules, I found explicit combinatorial formulas for some of the components of the characters of these modules. This relates to recent work of Gorsky, Negut and Rasmussen on the Euler characteristic of some sheaves on the flag Hilbert scheme, as well as the work of Hogancamp on the Hilbert-Poincaré series of the Khovanov-Rosansky homology of torus links.