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Carolina Benedetti V.* (c.benedetti@uniandes.edu.co). *A parking function model for flow polytopes*. Preliminary report.

We reinterpret a Lidskii formula for computing volumes of flow polytopes in terms of a family of combinatorial objects. This approach proves to be useful to compute the volumes in several cases. In particular, we recover classical results of Pitman-Stanley and show that the volume of a certain new flow polytope (called Caracol polytope) is the product of the Catalan number C_{n-2} times n^{n-2} , that is the number of parking functions of length $n - 1$. This is joint work with R. Gonzalez, C. Hanusa, P. Harris, A. Khare, A. Morales, M. Yip. (Received September 21, 2017)