The little secondary Bruhat order

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Abstract

Let R and S be two sequences of positive integers in nonincreasing order having the same sum. We denote by $\mathcal{A}(R, S)$ the class of all $(0, 1)-$matrices having row sum vector R and column sum vector S. In [1], Brualdi and Deaett suggested the study of the secondary Bruhat order on $\mathcal{A}(R, S)$ but with some constraints. In [2], we studied the cover relation and the minimal elements for this partial order relation, which we call the little secondary Bruhat order and that is the matter of this talk.

References:
[1] R.A. Brualdi and L. Deaett, More on the Bruhat order for $(0, 1)-$matrices, *Linear Algebra and its Applications*, 421 (2007) 219-232.
[2] R. Fernandes, H.F. da Cruz and D. Salomão, The little secondary Bruhat order, *Electronic Journal of Linear Algebra*, 37 (2021) 113-126.