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A reflection group perspective on c-vectors

c-vectors are part of the framework of a cluster algebra. Though late-comers in cluster algebra theory, they play a powerful role: it was shown by Nakanishi and Zelevinsky that many facts about cluster algebras follow by an elementary argument once it is known that each c-vector has all entries either non-negative or non-positive. I will give a classification of the collections of vectors that can appear as the c-vector of a cluster in a skew-symmetrizable cluster algebra starting from an acyclic seed, in terms of reflection groups. This is joint work with David Speyer, arXiv:1203.0277.