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Representation stability for the cohomology of arrangements associated to root systems

From a root system, one may consider the arrangement of reflecting hyperplanes, as well as its toric and elliptic analogues. The corresponding Weyl group acts on the complement of the arrangement and hence on its cohomology. We consider a sequence of linear, toric, or elliptic arrangements which arise from a family of root systems of type A, B, C, or D, and we study the rational cohomology as a sequence of Weyl group representations. Our techniques combine a Leray spectral sequence argument similar to that of Church in the type A case along with FI_W-module theory which Wilson developed and used in the linear case.