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Ehrenborg, Goresky and Readdy have developed a new theory of Euler flag enumeration of Whitney stratified spaces, and more generally, quasi-graded posets. This setting enables them to extend the classical notion of Eulerianness, and show the cd-index, a noncommutative polynomial which has been key to understanding the flag vector of polytopes, exists for Whitney-stratified spaces. Unlike Stanley's nonnegativity result for spherically-shellable posets, the coefficients of the cd-index for Whitney-stratified spaces can be negative. We focus on the induced subdivision arising from a manifold arrangement. This generalizes earlier results in several directions: (i) One can work with manifolds other than the n-sphere and n-torus, (ii) the induced subdivision is a Whitney stratification, and (iii) the submanifolds in the arrangement are no longer required to be codimension one. (Received August 26, 2013)