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Stratifications and reflection

I will describe a new duality in homotopy theory called reflection. This duality simultaneously generalizes Greenlees-May duality, the theory of BGP reflection functors giving derived equivalences of quivers, and Lurie's ∞-categorical Dold-Kan correspondence. Moreover, it leads to a categorification of the classical Mobius inversion formula. It is based on a theory of stratified (stable presentable) ∞-categories and is closely related to Verdier duality on stratified spaces. This is joint work with David Ayala and Aaron Mazel-Gee.