1104-14-108 **Daniel Litt*** (dalitt@stanford.edu). *Non-Abelian Lefschetz Hyperplane Theorems.*

Work of Lefschetz (in 1924) and Grothendieck (in SGA II) provides many relationships between properties of a smooth projective variety X and a smooth ample divisor D in X. For example, the singular or ℓ-adic cohomology of X agrees with that of D in low degree; X and D have the same Picard group if X has dimension at least 4; and X and D have the same π_1^{et} if X has dimension at least 3. I'll describe a general result which encompasses some of these Lefschetz hyperplane theorems and many new ones, comparing maps out of X to maps out of D. The case when the target of these maps is a moduli scheme or stack is of particular interest; for example, one may take the target to be M_g, and thus compare families of curves over X to families over D. (Received August 25, 2014)