

$$\mathbf{coCone}(S^\perp, \mathbf{Fil}(S)) \quad \ni \quad X \hookrightarrow X_F \longrightarrow X_C \quad : \quad \theta_X$$

$$\tau_X \quad : \quad K_F \hookrightarrow \mathbf{Free}(X) \sqcup_K K_F \longrightarrow X \quad \in \quad \mathbf{Cone}(S^\perp, \mathbf{Free} * \mathbf{Fil}(S))$$