

$$\begin{array}{ccccc}
S & \longrightarrow & \mathbf{Fil}(S) & \longrightarrow & \mathbf{Free} * \mathbf{Fil}(S) \\
(\cdot) \cup \{\Sigma^k \overline{(R)}\}_{k \in \mathbb{N}} \downarrow & & & & \downarrow \mathbf{Smd} \\
\tilde{S} & \longrightarrow & \mathbf{Fil}(\tilde{S}) & \xrightarrow{\mathbf{Smd}} & {}^\perp(S^\perp)
\end{array}$$