

${}^u B_u =$  Peirce proj LOO/42

$${}^u \tilde{g} = \underbrace{{}^u \tilde{g} - {}^u g}_{\text{}} {}^{u \tilde{g}} B_{u \tilde{g}} + {}^u g$$

$${}^u g - {}^u \tilde{g} \in D_{u \cdot \tilde{g}}^0 \subset Z_{u \cdot \tilde{g}}^0 \Rightarrow {}^u g - {}^u \tilde{g} = \underbrace{{}^u g - {}^u \tilde{g}}_{\text{}} {}^{u \tilde{g}} B_{u \tilde{g}}$$