

$$\begin{aligned}
 (\text{FixFunMinResBack}(f) \circ_{\mathbf{DP}} \text{FixFunMinResBack}(g))(x^*, z) &= \bigvee_{y \in Y} (y \in f^\star(x) \wedge (z \in g^\star(y))) \\
 &= z \in \bigcup_{y \in f^\star(x)} g^\star(y).
 \end{aligned}$$