$$(\mathrm{un}^{\mathbf{A}}_{\mathcal{U}} \mathbin{\mathring{\vphantom{o}}} \mathsf{Unc}(\mathbf{f}))(p^*, [q_1, q_2]) = \bigvee_{[p_1, p_2] \in \mathbf{Int}(\mathbf{A})} \mathrm{un}^{\mathbf{A}}_{\mathcal{U}}(p^*, [p_1, p_2]) \wedge \mathsf{Unc}(f)([p_1, p_2]^*, [q_1, q_2])$$

$$= \bigvee_{[p_1, p_2] \in \mathbf{Int}(\mathbf{A})} (p \preceq p_1) \wedge \mathbf{f}(p_1^*, q_1) \wedge \mathbf{f}(p_2^*, q_2)$$