

Definition (Feedback operator \dagger)

For $h : \mathbf{F}_1 \times \mathbf{R} \rightarrow \mathcal{A}\mathbf{R}$, define

$$h^\dagger : \mathbf{F}_1 \rightarrow \mathcal{A}\mathbf{R},$$

$$f_1 \mapsto \text{lfp} \left(\Psi_{f_1}^h \right),$$

where $\Psi_{f_1}^h$ is defined as

$$\Psi_{f_1}^h : \mathcal{A}\mathbf{R} \rightarrow \mathcal{A}\mathbf{R},$$

$$R \mapsto \text{Min}_{\leq \mathbf{R}} \bigcup_{r \in R} h(f_1, r) \cap \uparrow r.$$