

NOTE ON POLYNOMIALS

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Notation 0.1. We employ the following notations.

- For each set S and a family of sets $X: S \rightarrow \mathbf{Set}$, we write X_s for the image of $s \in S$ under X . Moreover, we write $(X_s)_{s \in S}$ for X .

Definition 0.2. We define a category **Poly** as the Grothendieck construction of the following pseudo functor.

$$\mathbf{Set} \xrightarrow{[-, \mathbf{Set}]^{\mathrm{op}}} \mathfrak{Cat}$$

A *polynomial* is an object in **Poly**.

REFERENCES

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