

# Notes about Prime Constellations

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**Definition 1.** *A Constellation is a function:  $\chi : \mathbb{N} \rightarrow \mathcal{P}(\mathbb{N})$*

$$\psi : \mathbb{N} \rightarrow \mathbb{N} \tag{1}$$

$$M_{\chi}^{\psi}(0) := \mathbb{N} \tag{2}$$

$$M_{\chi}^{\psi}(k) := M_{\chi}^{\psi}(k-1) \setminus \bigcup_{i \in \chi(\psi(k))} i\mathbb{N} \tag{3}$$

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**Definition 2.**

$$\Psi_{\chi}^{\psi} = \lim_{k \rightarrow \infty} M_{\chi}^{\psi}(k) \tag{4}$$

**Lemma 1.**

$$\mathbb{P} = \Psi_{id}^{\pi^{-1}} \tag{5}$$