$$A_0 \stackrel{f_0}{\longleftarrow} A_1 \stackrel{f_1}{\longleftarrow} A_2 \stackrel{f_2}{\longleftarrow} A_3 \stackrel{f_3}{\longleftarrow} \cdots$$

$$\prod_{i=0}^{\infty} A_i$$