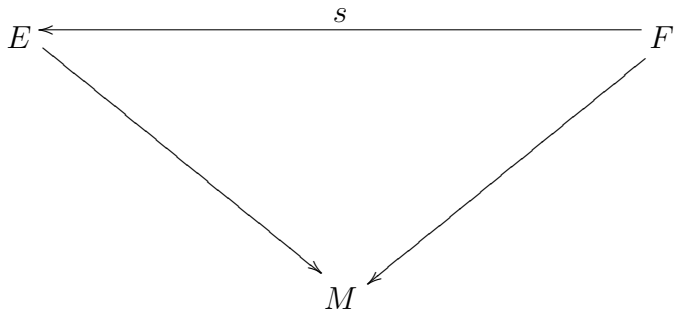


$$K_0\left(M\right)\ni T$$



$$V\mathbf{\times} D\in K^0\left(M\right)\mathbf{\times} K_0\left(M\right)\xrightarrow[\text{cap}]{\cap} K_0\left(M\right)\ni D_V$$

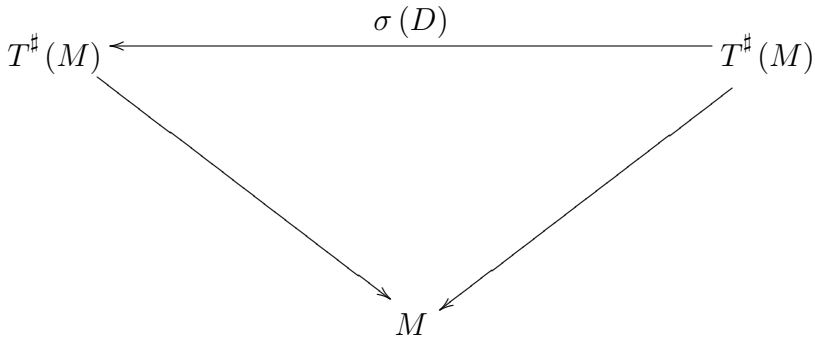
$$T\in K_0\left(M\right)\rightarrow K_0\left(M/M\right)=\mathbb{Z}\ni \operatorname{Ind} T$$

$$K^0\left(M\right)\xrightarrow{\operatorname{Dir}} K_0\left(M\right)\xrightarrow{\operatorname{Ind}} K^0\left(M/M\right)=\mathbb{Z}$$

$$E\mapsto D_E\mapsto \operatorname{Ind} D_E$$

$$\text{Atiyah-Singer}$$

$$\sigma\left(D\right)\in K_0\left(M\right)$$



$$M\overset{\mathbf{i}}{\rightarrow} \mathbb{S}$$

$$\sigma\left(D\right)\in K_0\left(M\right)\overset{\mathbf{i}_*}{\rightarrow} K_0\left(\mathbb{S}\right)=\mathbb{Z}\ni \operatorname{Ind} D$$