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"A sheaf of $\mathcal{O}_M$-modules is a sheaf $\mathcal{F}$ on M, s.t. for each open set $U \subseteq M$, the group $\mathcal{F}(U)$ is an $\mathcal{O}(U)$-module, and for each inclusion of open sets $V \subseteq U$, the restriction homomorphism $\mathcal{F}(U) \to \mathcal{F}(V)$ is compatible with the module structures via the ring homomorphism $\mathcal{O}(U) \longrightarrow \mathcal{O}(V)$.

A morphism $\mathcal{F} \to \mathcal{G}$ of sheaves of $\mathcal{O}$-modules is a morphism of sheaves, s.t. for each open set $U \subseteq M$, the map $\mathcal{F}(U) \longrightarrow \mathcal{G}(U)$ is a homorphism of $\mathcal{O}(U)$-modules."

$\ulcorner$ Given $\sigma \in H^0(M, \underline{\mathrm{Ext}}^1_{\mathcal{O}}(\mathcal{G}, \mathcal{F}))$,

$\sigma \in \underline{\mathrm{Ext}}^1_{\mathcal{O}}(\mathcal{G}, \mathcal{F})(M)$.

For each U_α,

$\sigma|_{U_\alpha} \in \underline{\mathrm{Ext}}^1_{\mathcal{O}}(\mathcal{G}(U), \mathcal{F}(U))$.

$\Rightarrow$ Since $\mathcal{G}(U_\alpha)$ & $\mathcal{F}(U_\alpha)$ are $\mathcal{O}(U_\alpha)$-modules, $\exists$ $\mathcal{E}_\alpha$, $\mathcal{O}(U_\alpha)$-module s.t

$$0 \longrightarrow \mathcal{F}|_{U_\alpha} \longrightarrow \mathcal{E}_\alpha \longrightarrow \mathcal{G}|_{U_\alpha} \longrightarrow 0$$

Since $\mathcal{O}(U_\alpha)$ is not equal to $\mathcal{O}$, we had better use a different trick.

For each point $x \in M$, $\sigma_x \in \underline{\mathrm{Ext}}^1_{\mathcal{O}}(\mathcal{G}, \mathcal{F})_x$
$= \underline{\mathrm{Ext}}^1_{\mathcal{O}}(\mathcal{G}_x, \mathcal{F}_x)$

$\Rightarrow$ Since $\mathcal{G}_x$ & $\mathcal{F}_x$ are $\mathcal{O}_x$-modules, $\exists$ $\mathcal{E}_x$, $\mathcal{O}_x$-module s.t