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since $'E_2^{0,0} = H^0(M, \underline{Ext}_{\mathcal{O}}^0(\mathcal{G}, \mathcal{E}))$
$'E_\infty^{0,0} \Rightarrow Ext^0(M; \mathcal{G}, \mathcal{E})$, $\Longrightarrow$

$$Ext^0(M; \mathcal{G}, \mathcal{E}) = {}'E_\infty^{0,0} = \cdots = {}'E_3^{0,0} = {}'E_2^{0,0} = H^0(M, \underline{Ext}_{\mathcal{O}}^0(\mathcal{G}, \mathcal{E}))$$
$$= H^0(M, \underline{Hom}_{\mathcal{O}}(\mathcal{G}, \mathcal{E})), \quad \cdots\cdots .$$

The converse is more interesting. Let $\mathcal{E}_\bullet(\mathcal{G}): \cdots \to \mathcal{E}_2 \xrightarrow{\partial} \mathcal{E}_1 \xrightarrow{\partial} \mathcal{G} \to 0$ be the global syzygy for $\mathcal{G}$, and $\underline{\mathcal{U}} = \{U_\alpha\}$ a sufficiently fine covering of M so that a class $e \in Ext^1(M; \mathcal{G}, \mathcal{F})$ is given by a cocycle in the hypercohomology group

$$\mathbb{H}^1(\underline{\mathcal{U}}, \underline{Hom}_{\mathcal{O}}(\mathcal{E}_\bullet(\mathcal{G}), \mathcal{F})).$$

$\ulcorner$ $\mathcal{E}_\bullet(\mathcal{G}): \cdots \to \mathcal{E}_2 \xrightarrow{\partial} \mathcal{E}_1 \xrightarrow{\partial} \mathcal{E}_0 \longrightarrow \mathcal{G} \longrightarrow 0$

$$\delta: C^p(\underline{\mathcal{U}}, \underline{Hom}(\mathcal{E}_q, \mathcal{F})) \longrightarrow C^{p+1}(\underline{\mathcal{U}}, \underline{Hom}(\mathcal{E}_q, \mathcal{F}))$$
$$\pm d: C^p(\underline{\mathcal{U}}, \underline{Hom}(\mathcal{E}_q, \mathcal{F})) \longrightarrow C^p(\underline{\mathcal{U}}, \underline{Hom}(\mathcal{E}_{q+1}, \mathcal{F}))$$

$$0 \to \underline{Hom}(\mathcal{G}, \mathcal{F}) \to \underline{Hom}(\mathcal{E}_0, \mathcal{F}) \to \underline{Hom}(\mathcal{E}_1, \mathcal{F}) \to \underline{Hom}(\mathcal{E}_2, \mathcal{F}) \to \cdots$$

$$C^n(\underline{\mathcal{U}}) = \sum_{p+q=n} C^p(\underline{\mathcal{U}}, \underline{Hom}(\mathcal{E}_q, \mathcal{F})).$$

$$Ext^1(M; \mathcal{G}, \mathcal{F}) = \varinjlim_{\underline{\mathcal{U}}} H^1(C^*(\underline{\mathcal{U}}), D)$$
$$= \mathbb{H}^1(M, \underline{Hom}(\mathcal{E}_\bullet(\mathcal{G}), \mathcal{F}))$$

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