Leray spectral sequence

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The *Leray spectral sequence* is a special case of the Grothendieck spectral sequence regarding composition of functors.

If $f : X \to Y$ is a continuous map of topological spaces, and if $\mathcal{F}$ is a sheaf of abelian groups on X, then there is a spectral sequence, called the Leray spectral sequence, given by

$E_2^{pq} = H^p(Y, \mathrm{R}^q f_* \mathcal{F}) \implies H^{p+q}(X, \mathcal{F})$

where f_* is the direct image functor.