$(d K^{p+q-1} + F^{p+1} K^{p+q}) \cap \{a \in F^p : da = 0\}$

One of our main examples is the spectral sequence associated to a double complex. This latter is a bi-graded group

$$K^{*,*} = \bigoplus_{p,q \geq 0} K^{p,q}$$

together with differentials

$$d : K^{p,q} \longrightarrow K^{p+1,q}$$
$$\delta : K^{p,q} \longrightarrow K^{p,q+1},$$

satisfying

$$d^2 = \delta^2 = 0, \qquad d\delta + \delta d = 0.$$

The double complex will be denoted $(K^{*,*}; d, \delta)$. The associated single complex (K^*, D) is defined by

$$K^n = \bigoplus_{p+q=n} K^{p,q}$$

$$D = d + \delta.$$

There are two filtrations on (K^*, D) given by

$$'F^p K^n = \bigoplus_{\substack{p'+q=n \\ p' \geq p}} K^{p',q},$$

$$''F^q K^n = \bigoplus_{\substack{p+q''=n \\ q'' \geq q}} K^{p,q''}.$$

If, e.g., M is a complex manifold and

$$K^{p,q} = A^{p,q}(M), \qquad d = \partial, \quad \delta = \bar{\partial},$$

then $'F^p A^n(M)$ means "n-forms having at least p - dz's."