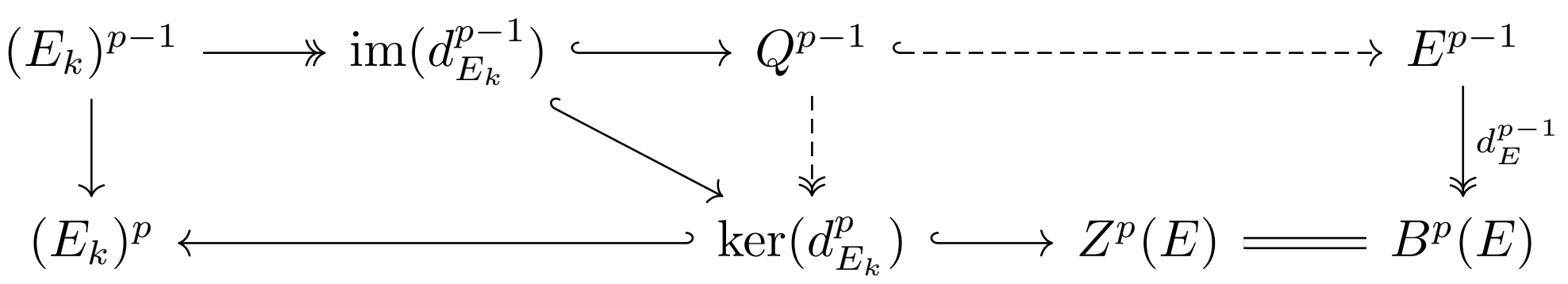
$(E_k)^{p-1}$
$\mathrm{im}(d^{p-1}_{E_k})$
$Q^{p-1}$
$E^{p-1}$
$d^{p-1}_E$
$(E_k)^p$
$\ker(d^p_{E_k})$
$Z^p(E)$
$B^p(E)$