

$  \begin{array}{c}  X^{p+2} \oplus Y^{p+1} \xlongequal{\quad} E^{p+1} \\  \left( \begin{array}{cc} -d_X & 0 \\ f & d_Y \end{array} \right) \uparrow \\  X^{p+1} \oplus Y^p \xlongequal{\quad} E^p \\  \left( \begin{array}{cc} -d_X & 0 \\ f & d_Y \end{array} \right) \uparrow \\  X^p \oplus Y^{p-1} \xlongequal{\quad} E^{p-1} \\  \left( \begin{array}{cc} -d_X & 0 \\ f & d_Y \end{array} \right) \uparrow \\  X^{p-1} \oplus Y^{p-2} \xlongequal{\quad} E^{p-2}  \end{array}  $	$  \begin{array}{c}  Y^{p+2} \\  \searrow \cdots \hookrightarrow \\  Y^{p+1} \\  \searrow \cdots \hookrightarrow \\  Y^p \\  \searrow \cdots \hookrightarrow \\  Y^{p-1}  \end{array}  $	$  \begin{array}{c}  X^{p+2} \\  \uparrow \\  X^{p+1} \\  \uparrow \\  X^p \\  \uparrow \\  X^{p-1}  \end{array}  $	$  \begin{array}{c}  Y^{p+2} \\  \uparrow \\  Y^{p+1} \\  \uparrow \\  Y^p \\  \uparrow \\  Y^{p-1}  \end{array}  $
<div style="border: 1px solid black; padding: 5px; display: inline-block;">初</div>		<div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>E_0</math></div>	