

```
$QZipFail = False;
```

```
QZip $\xi_s$ _List@ $\mathbb{E}$ [ $\omega$ _,  $L$ _,  $Q$ _,  $Ps$ _] :=
```

```
PPQzip4@Module[{ $\xi$ ,  $z$ ,  $zs$ ,  $c$ ,  $ys$ ,  $\eta s$ ,  $qt$ ,  $zrule$ ,  $\xi rule$ },
```

```
 $zs$  = Table[ $\xi^*$ , { $\xi$ ,  $\xi s$ }];
```

```
 $c$  = CF[ $Q$  /. Alternatives @@ ( $\xi s \cup zs$ )  $\rightarrow$  0];
```

```
 $ys$  = CF@Table[ $\partial_\xi (Q$  /. Alternatives @@  $zs \rightarrow 0)$ ,
```

```
{ $\xi$ ,  $\xi s$ }];
```

```
 $\eta s$  = CF@Table[ $\partial_z (Q$  /. Alternatives @@  $\xi s \rightarrow 0)$ , { $z$ ,  $zs$ }];
```

```
 $qt$  = CF@Inverse@Table[ $K\delta_{z,\xi^*} - \partial_{z,\xi} Q$ , { $\xi$ ,  $\xi s$ }, { $z$ ,  $zs$ }];
```

```
 $zrule$  = Thread[ $zs \rightarrow$  CF[ $qt.(zs + ys)$ ]]; 
```

```
 $\xi rule$  = Thread[ $\xi s \rightarrow \xi s + \eta s.qt$ ];
```

```
CF /@  $\mathbb{E}$ [ $\omega$  Det[ $qt / \omega$ ],  $L$ ,  $c + \eta s.qt.ys$ ,
```

```
Zip $\xi s$ [ $Ps$  /. ( $zrule \cup \xi rule$ )]];
```