

```

Z[K_] :=
  Z[RVK@EchoFunction[Width]@ThinPosition[K, 100]];
Z[rvk_RVK] :=
Monitor[PP"z"@Module[{ξ, done, st, c, χ, i, j, k},
  ξ = 1; done = {}; st = Range[2 Length[rvk[[1]]];
  $M = {};
  Do[AppendTo[$M, c];
    {i, j} = List@@c;
    χ =
      (c /. {_Xp :-> kRi,j  $\overline{kKink}_\theta$ , _Xm :->  $\overline{kR}_{i,j}$  kKinkθ}) //
      kmj,θ→j;
    Do[χ = (rot[θ, rvk[[2, k]]] χ) // kmθ,k→k,
      {k, {i, j}}];
    ξ *= χ;
    Do[
      If[MemberQ[done, k + 1], ξ = ξ // kmk,k+1→k;
        st = st /. k + 1 → k];
      If[MemberQ[done, k - 1],
        ξ = ξ // kmst[[k-1],k→st[[k-1]];
        st = st /. k → st[[k - 1]],
        {k, {i, j}}];
      done = done ∪ {i, j},
      {c, rvk[[1]]}
    ];
  CF /@ (ξ /. {x1 → x, y1 → y, a1 → a})
], {Length@$M, $M}]

```