

```

Z[K_] := Z[RVK@K];
Z[rvk_RVK] := Module[{ξ, done, st, c, χ, i, j, k},
  ξ = 1; done = {}; st = Range[2 Length[rvk[[1]]];
  Do[
    {i, j} = List@@c;
    χ = (c /. {_Xp :-> Ri,j, _Xm :-> R̄i,j}) (kaθ - kdθ) //
      mj,θ→j;
    Do[χ = (rotθ[rvk[[2, k]]] χ) // mθ,k→k,
      {k, {i, j}}];
    ξ *= χ;
    Do[
      If[MemberQ[done, k + 1], ξ = ξ // mk,k+1→k;
        st = st /. k + 1 -> k];
      If[MemberQ[done, k - 1], ξ = ξ // mst[[k-1],k→st[[k-1]];
        st = st /. k -> st[[k - 1]],
        {k, {i, j}}];
      done = done ∪ {i, j},
      {c, rvk[[1]]}
    ];
  Factor@ξ
]

```