

```
<< KnotTheory`
```

```
Loading KnotTheory` version of April 20, 2009, 14:18:34.482.
```

```
Read more at http://katlas.org/wiki/KnotTheory.
```

```
L = PD[
  X[12, 6, 1, 5], X[8, 2, 9, 1], X[4, 10, 5, 9],
  X[18, 3, 13, 2], X[3, 14, 4, 13], X[14, 11, 15, 10],
  X[11, 16, 12, 15], X[16, 7, 17, 6], X[7, 18, 8, 17]
];
```

```
j = Jones[L][q]
```

```
-q7/2 - q11/2
```

```
maybe = Select[AllLinks[], (
  quo = Factor[(Jones[#][q] / j)];
  quo == 1 || quo == q || MatchQ[quo, q^_]
) &]
```

```
KnotTheory::loading: Loading precomputed data in Jones4Links`.
```

```
{Link[2, Alternating, 1], Link[9, NonAlternating, 15]}
```

```
mva = MultivariableAlexander[L][t]
```

```
KnotTheory::credits:
```

The multivariable Alexander program "MVA2" was written by Jana Archibald at the University of Toronto in 2007–2008.

$$\frac{1 + t[1] t[2]^2 + t[1]^2 t[2]^4}{t[1] t[2]^2}$$

```
MultivariableAlexander[#][t] & /@ maybe
```

```
KnotTheory::loading: Loading precomputed data in MultivariableAlexander4Links`.
```

$$\left\{ -t[1], -\frac{1 + t[1] t[2]^2 + t[1]^2 t[2]^4}{t[1] t[2]^2} \right\}$$

`DrawMorseLink [Link["L9n15"]]`

`KnotTheory::loading` : Loading precomputed data in `PD4Links`.

`KnotTheory::credits` : MorseLink was added to `KnotTheory` by Siddarth Sankaran at the University of Toronto in the summer of 2005.

`KnotTheory::credits` : DrawMorseLink was written by Siddarth Sankaran at the University of Toronto in the summer of 2005.

