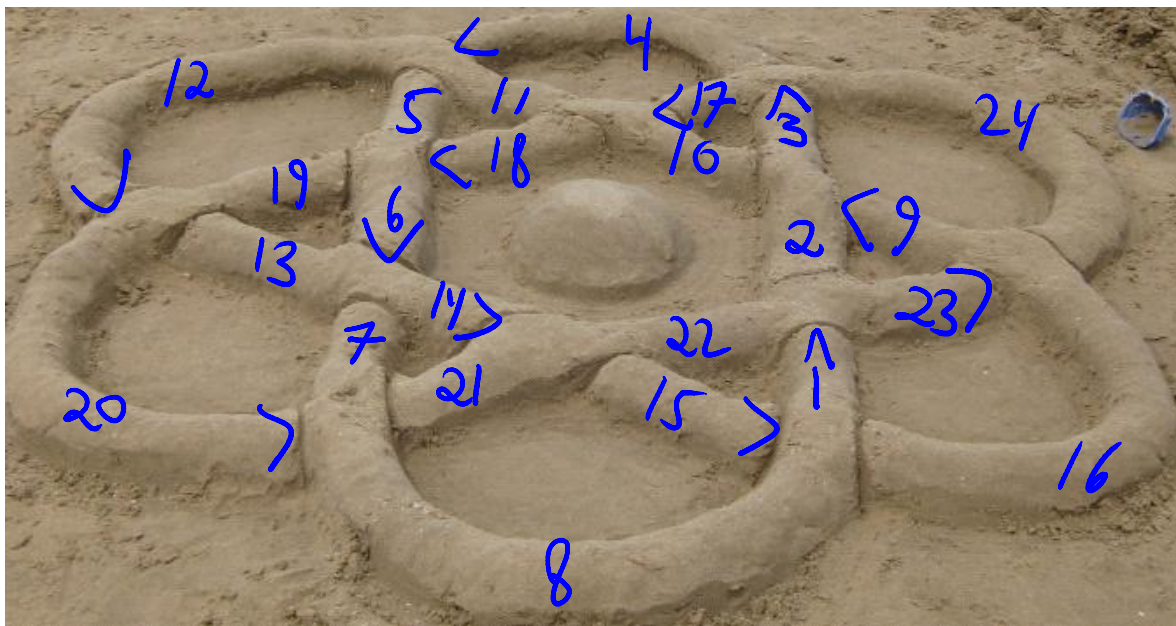# A Link from David Swart

August-16-10
4:40 PM


```
PD[
  X[1,23, 2,22], X[3,24,4,17], X[4,12,5,11], X[6,13,7,14],
  X[9,3,10,2], X[12,20,13,19], X[14,21,15,22], X[15,8,16,1],
  X[17,11,18,10], X[18,5,19,6], X[20,8,21,7], X[23,16,24,9]
]
```

David,

It seems that the current answer to "identify that link" is "it is what it is". I had thought the lists of links I had access to include 12-crossing links. Had this been the case, I could have given an answer of the form "this is link number nnnn in XXXX listing". Not that that answer would have been very meaningful, but it would be something.

Anyway, prompted by your question a group of us (me, Oleg Chterental, Karene Chu, Iva Halacheva, Louis Leung, Daniel Moskovich, and Arkadius Kalka) decided to spend our regular afternoon meeting making a list of 3-compenent Brunnian links. About an hour later we found that likely there are only 4 3-compenent Brunnian links with less than 12 crossings; these are L6a4, L10a140, L11a434, and L11n436 (enter these in the search box http://katlas.org if you want to see what they look like). So your link is probably tied as "number 5 Brunnian with 3 components" with an unknown number of other 12-crossings links. And that "tie" number remains unknown because presently I don't have a list of all 12-crossing links.

BTW, you should take a look at L11a434 (at http://katlas.org/wiki/L11a434). It's actually quite hard to see that it is Brunnian, as red and purple really seem linked, though they aren't.

Our work is all at http://katlas.math.toronto.edu/drorbn/AcademicPensieve/2010-08/. See

"A Link from David Swart" in two places, and "All Brunnians, Maybe" in one place.

Best,

Dror.