

Exercise: Use Perturbed  
Gaussian integration to  
compute  $\text{Vol}(S^n)$ .

0. Review, today's  
goal.

1. A "knot invariant" in the abstract.

2. Example: The Conway polynomial.

(Define, explain, ~~draw~~  $\frac{3}{2}$  ~~draw~~,  
print a table ...)

Exercise: Pick your favourite bank & compute  
the Conway poly. of its logo.



3. The definition of finite type, the Conway  
example.

4. From weight systems to  $A$  &  $YT$ .

Exercise: 1. Determine the weight system  
of the Conway polynomial, verify  $YT$ .

2. Learn about Jones, determine its  
w.s., verify  $YT$ .

5. Tabulating the results.

6. UFTIs, "expansions"

7. Bracket rise.

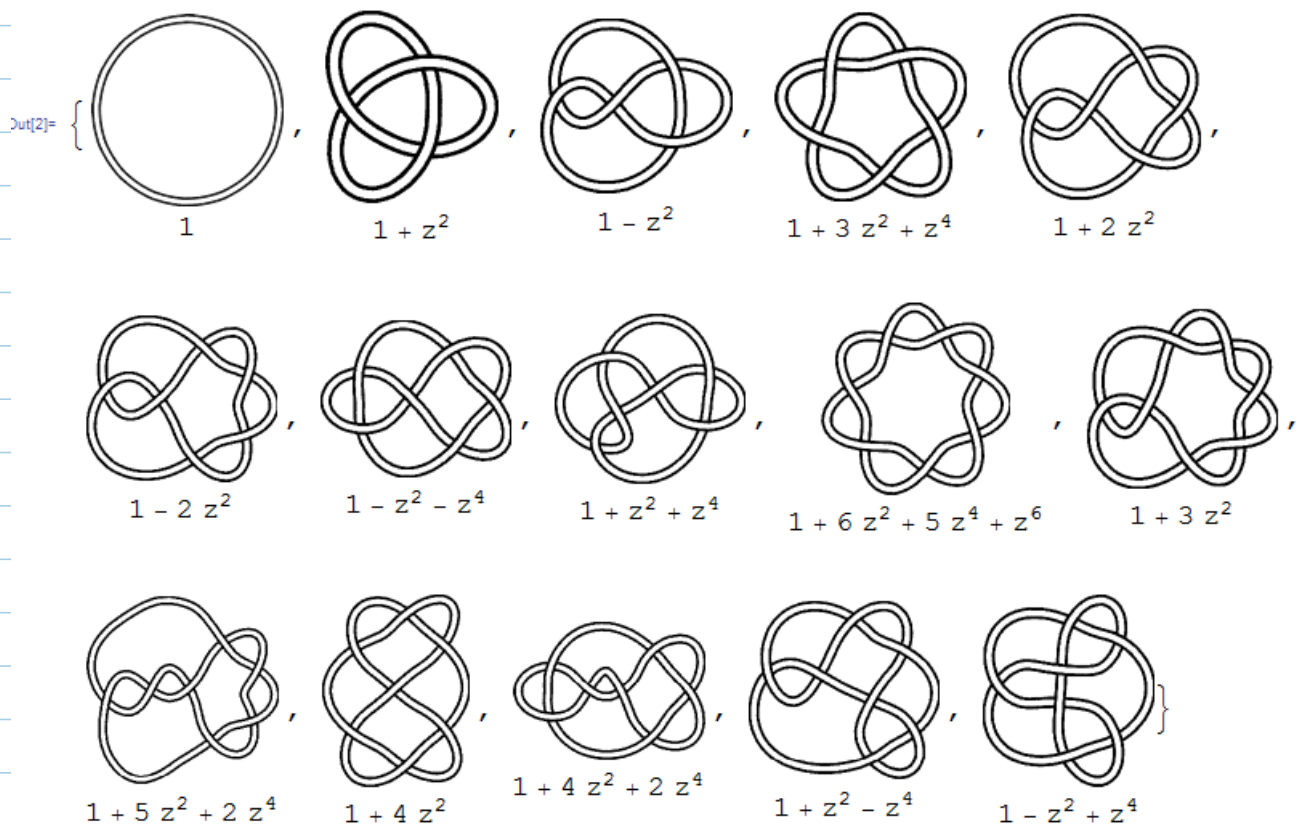
8. The pairing w/ Lie algebras. push to  
Lecture 4.

```
In[1]:= << KnotTheory`
```

```
Loading KnotTheory` version of August 22, 2010, 13:36:57.55.  
Read more at http://katlas.org/wiki/KnotTheory.
```

```
In[2]:= Column[{  
  Import[  
    "C:\\drorbn\\AcademicPensieve\\2011-07\\RolfsenKnots\\"  
    <> ToString@#[[1]] <>  
    "." <> ToString@#[[2]] <> "_240.gif"],  
  Conway[#][z]  
  }, Center  
] & /@ AllKnots[{0, 7}]
```

KnotTheory::loading : Loading precomputed data in PD4Knots`.



Post mortem moral: I should learn to put

in references!