

3/5/02

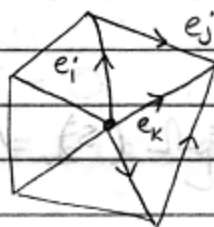
Relating "The Dream" table to what we did last year.

TQFT's

A can actually use category here

category
w/ one
object =
monoid

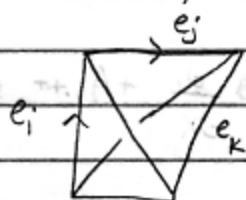
• 2d TQFT's from ^{certain} algebras



so we're at $n=0, k=1$ on
chart - monoids (alg. are special case of monoids)

• 3d TQFT's from ^{certain} monoidal categories - a 1-object 2 cat.
chop up into tetrahedra, calculate a # using
associator

so we
should try
to get



3d TQFT's
from
2-categories

Note - we were using reps of $SU(2)$, so
 $j \otimes k \rightarrow l$

3d TQFT - theory of quantum gravity in 3 dim'l spacetime

Top Secret guess: 2d triangulated QFT's come from
certain 2-categories, so TQFT's are special case

3 Hilbert spaces

categories - 2 Hilbert spaces since Hilbert space is a
special kind of set.