

Dror Bar-Natan: Classes: 2003-04: Math 1350F - Knot Theory:

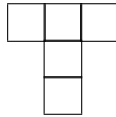
## Homework Assignment 7: $so(N)$

Assigned Thursday October 30; due Thursday November 6 in class.

**To be handed in.** Describe a simple combinatorial algorithm for the computation of  $W_{so(N)}(D)$ , where  $D$  is an arbitrary chord diagram.

**Recommended for extra practice.** Describe a simple combinatorial algorithm for the computation of  $W_{sl(N)}(D)$ , where  $D$  is an arbitrary chord diagram.

**Just for fun.** A capital letter T is formed from five identical squares, by arranging three squares across the top and two more directly under the center square:



How can the resulting letter be cut into FOUR pieces of identical size and shape? (The pieces may be turned over to check that they are identical.) (Credit: Peter Malcolmson, Wayne State University)