Slideways Burr

Three identical piece slide together simultaneously to make a 3-dimensional cross.

Assembly: Hold one piece vertically and determine how a second piece fits (there are only a few possibilities; look for the one where two faces sit nicely together), then carefully slide it out and put that piece down on the table without disturbing its orientation, then do the same for the third piece. Now that you have determined the orientation of the three pieces, hold them in their orientations so that they are just on the verge of engaging, line everything up, and then just squeeze the three together.

Disassembly: Randomly jiggle and push on the pieces until you can get it to come apart just a bit. You can keep doing this until the puzzle comes apart, but as it comes apart a bit you should be able to find the right way to hold on to and push two of the pieces so that the puzzle slides apart, and you can just push and pull to make it expand and contract, where the third piece is being controlled by the movement of the other two that you are holding.

Here are two views of the puzzle in a partially expanded state: