

## Gluing together the deformable Klein Quartic

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I am not very good at making nice and tidy cardboard constructions, but here is how I make it.

Make 6 prints of the picture in [KleinLegs.pdf](#), and 1 print of [KleinConnectors.pdf](#). I use 160 grams paper, which is the thickest paper that I dare feed my printer.

Then, you should probably pre-score all folding lines. A good way is to use a ball point pen without ink. (I actually use one *with* ink...). Or the blunt side of a knife also works.

The connectors are straight forward. The baffles take some practice. I first glue them in a cylinder. Then do the 'Miura folds'. If you Google 'Miura fold', you should see quite a few Youtube instructions for doing them, by people who are very good at it.

Then, glue the connectors to the legs.

The coloring of the baffles is chosen so that you can have the same color (yellow as seen in the picture) glued to the top of the connector prisms. But when you turn the Quartic inside-out, you will see these colors are all green.

I strengthen the bonds of the legs to the connector with plastic melt glue. But that could be done nicer.

I altered the design slightly since the photo: Now the baffles are connected to the connectors so that the first zigzag sticks in the direction normal to the central triangle. Gives a nicer connection.