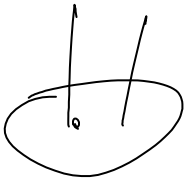<u>Goal</u>   Find the minimum area disk in $\mathbb{R}^3$, with a given boundary.

<u>problem</u>:   shows soln is non-unique.

$\Rightarrow$ switch to "minimize Dirichlet energy"

<u>Problem</u>: The Dirichlet energy is conformally invariant — membranes can be stretched to degenerate placements.

$\Longrightarrow$ Fix 3 points on the wire.