

1126-49-220

Philipp Reiter* (philipp.reiter@uni-due.de), University of Duisburg-Essen, Faculty of Mathematics, 45117 Essen, Germany. *On elastic knots.*

What actually happens if one forms a knot in a piece of springy wire and releases it?

We will formulate this question as a minimization problem and apply techniques from the calculus of variations.

We discuss analytical solutions as the thickness of the wire tends to zero, physical experiments, and numerical simulations.

This is joint work with Henryk Gerlach and Heiko von der Mosel. (Received January 14, 2017)