Title: Nobody Solves the Quintic Web Site Supervisor: Dror Bar-Natan

There is a truly lovely and relatively easy topological proof of one of the most fundamental results of Galois theory, that there isn't a "formula" for solving equations of degree 5 and up. I have given talks to explain that proof (e.g.,

https://www.math.toronto.edu/~drorbn/Talks/Sydney-1708/ and https://www.math.toronto.edu/~drorbn/Talks/CMU-1504/ ) and they are on video. But the animations I have used are clunky and need to be modernized. Would you be interested in doing that?

At minimum you will need to re-implement the animations in my talks so as to run stably within a web browser. Even better if you will be able to add and improve, perhaps making it into a full web site explaining and exploring the proof.

<u>Requirements:</u> You must learn and feel fully comfortable with the proof and you must care for presentation. You must feel comfortable with graphics programming.

<u>Warning:</u> There is a fair chance I will be away for a good portion of the summer, or possible even for all of it. So much of our communications will have to occur over zoom.