1099-55-392   **Rob Scharein*** (`rob@knotplot.com`), 2116 West 6 Avenue, #211, Vancouver, BC V6K 1V6, Canada. *New possibilities for computational experiments with physical knots.*

After more than twenty years of experimenting with physical knots on a computer, there still remain many unsolved problems and the field is wide open for new kinds of investigations. We will look at several approaches to setting up such experiments, for example, colliding knots with various obstacles, simulating knots in arbitrary cavities and also playing in the still exciting arena of random knotting.

In addition to performing experiments, it is equally important to be able to analyze the results. Perhaps the greatest task that confronts the experimenter could be called *The Black Art of Knot Identification.* We will focus on some of the difficulties inherent in that endeavour. In addition, some new visualization techniques will be showcased. (Received February 11, 2014)