

1135-B1-1139 **Rachael Talbert*** (rtalbe1@students.towson.edu), **Diana Cheng** and **Tetyana Berezovski**.
Mathematical interpretations of figure skaters' blade tracings.

We show a series of mathematical modelling problems about figure skaters' blade tracings. These problems were solved by undergraduate pre-service middle school mathematics teachers, who interpreted skating rink diagrams using their knowledge of circumferences of circles, expressions and equations, scaling, and rates. In an open-ended problem, the pre-service teachers were asked to choreograph their own skating step sequences and report on their mathematical properties. We report on some sample student work. (Received September 19, 2017)