Tetyana Berezovski\* (tberezov@sju.edu), Saint Joseph's University, Department of Mathematics, 5600 City Ave, Philadelphia, PA 19131. *Mathematical Models in Rhythmic Gymnastics (RG)*. Preliminary report.

Over the past several decades mathematics was used in many different sports for various purposes. RG is a kind of sport where creativity of movement plays an important role. The aim of RG is to express emotions and feelings by the mean of bodily movements, performed at the highest level of technical difficulty. The aesthetic of this sport makes it attractive to spectators. In this presentation you will learn about mathematical models that were developed and used to improve training, artistry, the performance of routines, dietary assessments, and quality of judging in RG. (Received September 24, 2018)