

## **Abstract**

**Title:** Comparison of Current Methods of Cycling Set Up for Cycling Olympic triathlon (case study).

**Objectives:** The main aim of the thesis is to compare the subjective and objective performance of selected fitting settings.

**Methods:** In our work we compared three methods of cycling setting - theoretical methodology of calculation and individual dynamic methodology of Retül and Guru Fit Bike. We used the objective performance evaluation Spiroergometric stress test. We have rated the performance achieved at the level of aerobic and anaerobic threshold and then compared the maximum achieved parameters. The pedal technique was evaluated using the Wattbike SW. Comparison was performed using percentage points. Subjective assessment was carried out by means of a controlled interview.

**Results:** We found that proband in the subjective evaluation better evaluated the methods of the Guru Fit Bike and Retül compared to the objective rating in which the theoretical method achieved the best results.

**Keywords:** biomechanics, fitting, effectiveness of cycling, pedal technique, spiroergometry.