

AN ANALYSIS OF THE HUMAN MOTION USING VIBE FUNCTIONS

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Abstract: The paper is a study regarding the kinematics of motion made by an athlete during a hurdle race by emitting an explosive compulsiveness of biomedical motions, compulsiveness lining on the psychological support offered to the athlete by the attainment of performance and by his coach's encouragement.

The laws of hurdle race kinematics, which are general for all athletes motions, pursue the tendency to maintain speed at the highest level and to resume it after each pass. These laws have been tested in another discipline also namely pole vaulting.

Key words: Cardan's finite rotations, kinematical analysis, hurdles race.