

In the thesis we will look at curves with pythagorean hodograph (PH curves) whose speed is polynomial with respect to parameter. We will consider planar PH curves of degree 3 (PH cubics) exclusively. We will present their complex representation and preimage. Preimage is a simpler curve from which a PH curve is created and which determines its properties. First we will look at the basic properties of PH curves with respect to their preimage. The main aim of the thesis is determining continuousness of joints of PH curves on the basis of the shape of their preimage. We will give specific conditions on preimage for achieving certain types of continuousness. Finally we will give some examples in order to illustrate the results.