

The topic of this thesis is scattering in the model 2D potential with symmetry given by the C_{3v} group. Used potential is based on the Henon-Heiles potential, which is known as a typical example of a potential with chaotic classical dynamics. This fact caused, that there were observed a chaotic (fractal) behaviour in the classical solution of the scattering problem. In spite of it, this thesis primary focuses on the quantum case. There were used two numerical methods for solving it. The first method was based on an expansion of the wave function in the Fourier series and solving the radial equations on grid. The second method was the R -matrix method. After that, there were studied some physical properties of the solutions: cross-section and the eigenphase sum. The resonances in the model were also studied. The results computed by both methods were compared at the end.