

Abstract.

Subject of a paper is experimental and numerical investigation of filamentation in fused silica under normal and anomalous group velocity dispersion of femtosecond radiation focused with an axicon. It was shown that emerged bullets' parameters are stable and don't depend on type of focusing. It was found experimentally and numerically that each next bullet emergence is accompanied by discrete and equal increase in visible supercontinuum energy. Besides it was found that slight change in wave front curvature leads to significant change in plasma channels location. Moreover this effect is weaker in case of anomalous group velocity dispersion because of light bullets' parameters stability.