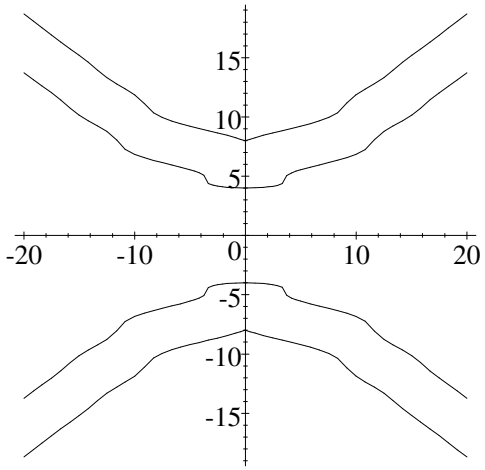

Figure 1. Mean world lines of particles at collision particle -particle for $\Delta = 0.01$, $m = 1$, $p = 1$. Space axis is vertical, time axis horisontal.

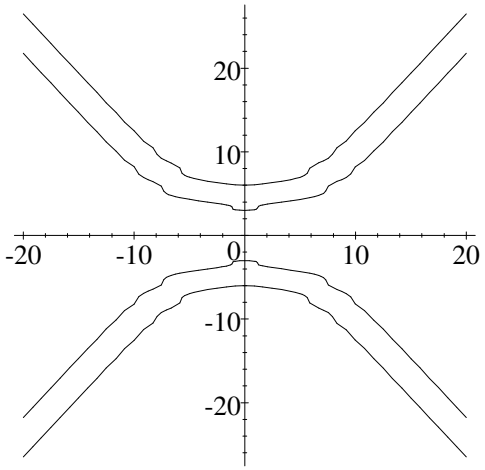

Figure 2. Mean world lines at the particle - antiparticle collision for $\Delta = 0.01$, $m = 1$, $p = 1$. Time axis is vertical, space axis is horisontal.

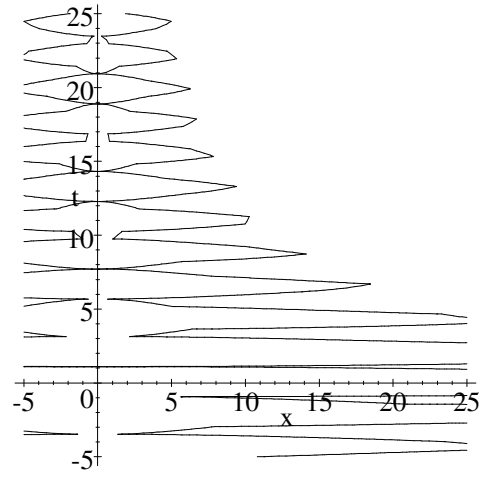

Figure 3. Regions with $m_{\text{eff}}^2 < 0$ for $\Delta = 0.01$ $m = 1$, $p = 1$. $m_{\text{eff}}^2 < 0$ in regions adjacent to vertical axis. Time axis is vertical, space axis is horisontal