Three pions decay of the omega
+ background

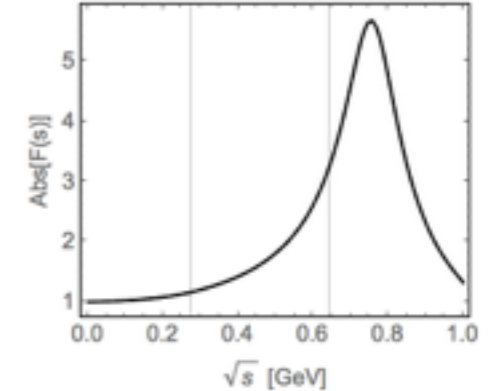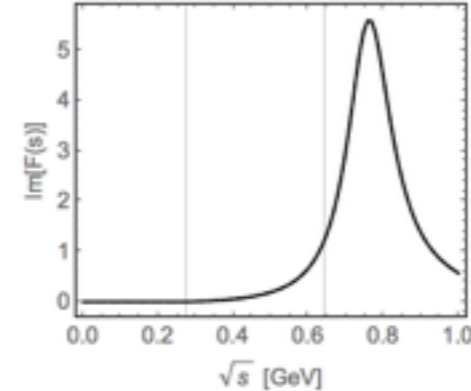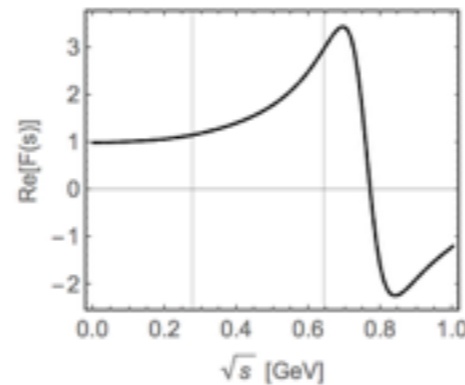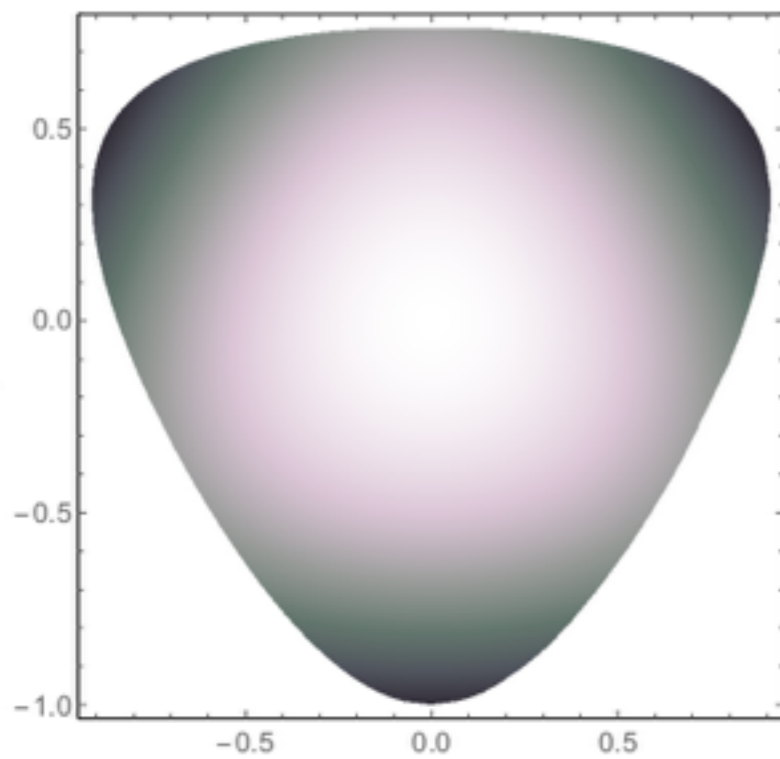$$\frac{d^2\Gamma}{ds\,dt} = \frac{1}{(2\pi)^3}\frac{1}{32M^3}\frac{1}{3}\sum_\lambda \left|H_\lambda^{\omega\to\pi^+\pi^-\pi^0}\right|^2 = \frac{1}{(2\pi)^3}\frac{1}{32M^3}\frac{1}{3}P(s,t)\left|F(s,t,u)\right|^2,$$

$$P(s,t) = \frac{1}{4}\left(s\,t\,u - m_\pi^2\left(M^2 - m_\pi^2\right)^2\right),$$
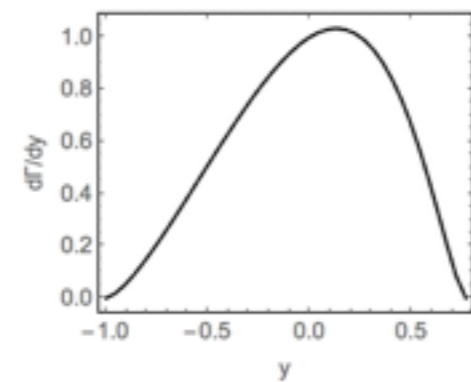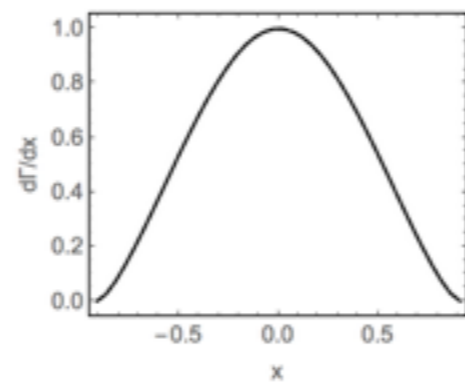
$$F(s,t,u) = F(s) + F(u) + F(t)$$
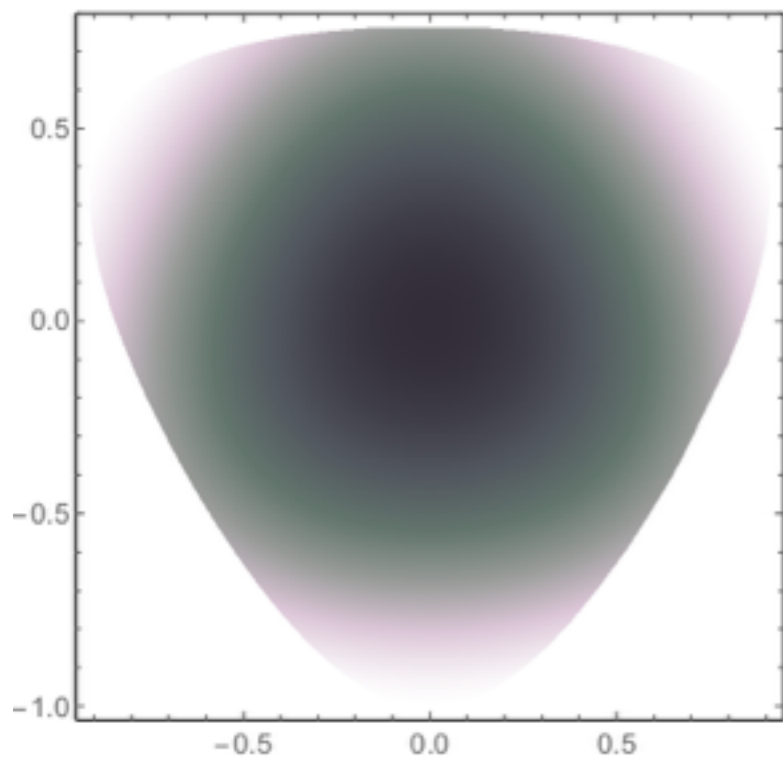

const=0,IgorPar=0

$$\frac{d^2\Gamma}{ds\,dt} = \frac{1}{(2\pi)^3}\frac{1}{32M^3}\frac{1}{3}\sum_{\lambda}|H_{\lambda}^{\omega\to\pi^+\pi^-\pi^0}|^2 = \frac{1}{(2\pi)^3}\frac{1}{32M^3}\frac{1}{3}P(s,t)\,|F(s,t,u)|^2 \,,$$

$$P(s,t) = \frac{1}{4}\Big(s\,t\,u - m_\pi^2\big(M^2 - m_\pi^2\big)^2\Big) \,,$$

$$F(s,t,u) = F(s) + F(u) + F(t) \quad \boxed{+\ 3\ \text{Const}}$$

Background

Dashed: const=0,IgorPar=0
Black: const=-3, IgorPar=0
Red: const=0,IgorPar=-10

const=-3