6.21

$$\lim_{x\to 0}\frac{2x^2-\eta\mu^2 x}{x^2\eta\mu^2 x}=\lim_{x\to 0}\frac{2x^2-\eta\mu^2 x}{x^2}\cdot\lim_{x\to 0}\frac{1}{\eta\mu^2 x}=\lim_{x\to 0}\left(\frac{2\cancel{x^2}}{\cancel{x^2}}-\frac{\eta\mu^2 x}{x^2}\right)\cdot\lim_{x\to 0}\frac{1}{\eta\mu^2 x}=$$

$$=(2-1)(+\infty)=\boxed{+\infty}$$