

Euklidischer Raum (Vektorraum)

(1) $f_\alpha(x) = \Theta(x) \frac{x^{\alpha-1}}{\Gamma(\alpha)} e^{-\alpha x}$ $\alpha > 0$ $\Rightarrow \alpha > 0$ ergibt

$$\Rightarrow f_\alpha * f_\beta = f_{\alpha+\beta}$$

(2) $f_\alpha(x) = \Theta(x) \frac{x^{\alpha-1}}{\Gamma(\alpha)} e^{\alpha x}$ $\alpha > 0 \Rightarrow f_\alpha * f_\beta = f_{\alpha+\beta}$

(3) $f_\alpha(x) = \frac{\alpha}{\pi} \frac{1}{\alpha^2 + x^2}$ $\alpha > 0 \Rightarrow f_\alpha * f_\beta = f_{\alpha+\beta}$

(4) $f_\alpha(x) = \frac{1}{\sqrt{2\pi} \alpha} e^{-\frac{x^2}{2\alpha}}$ $\alpha > 0 \Rightarrow f_\alpha * f_\beta = f_{\alpha+\beta}$