1.1

f ((

(

(

$$f(G \quad \frac{1}{\sqrt{2\,S}} e^{\frac{G^2}{2\,V^2}}$$

$$f(G) = \frac{1}{\sqrt{2S}} e^{-\frac{G^2}{2V^2}}$$

(d (p f(()d (

(0 f(0) $= \frac{1}{\sqrt{2S}}$

$\int_{f}^{f} f(\ )dG = G\ 1$

1

((f, f)

100%

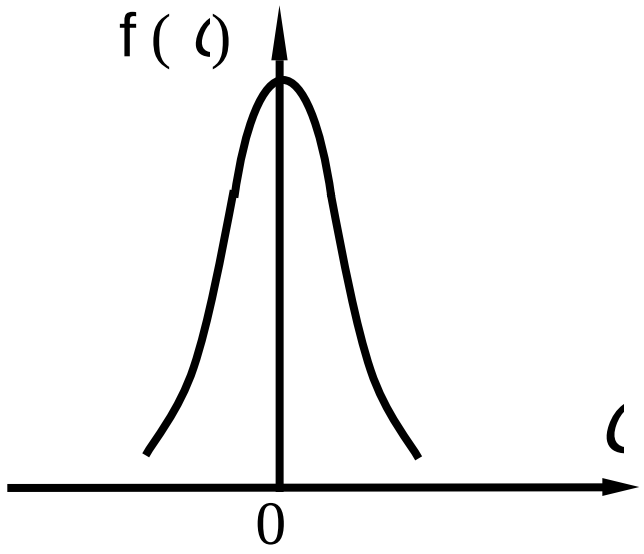
$$f(G) = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{G^2}{2\sigma^2}}$$

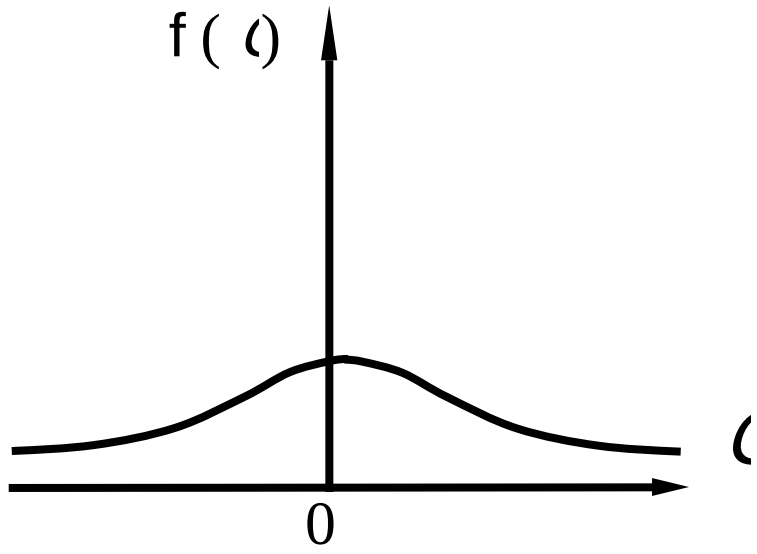
n

$$V = \lim_{n \to \infty} \sqrt{\frac{1}{n} \sum_{i=1}^{n} (x_i - x_0)^2}$$

x_0

$$f(G) = \frac{1}{\sqrt{2S}} e^{\frac{G^2}{2V^2}}$$


f (ω)
0

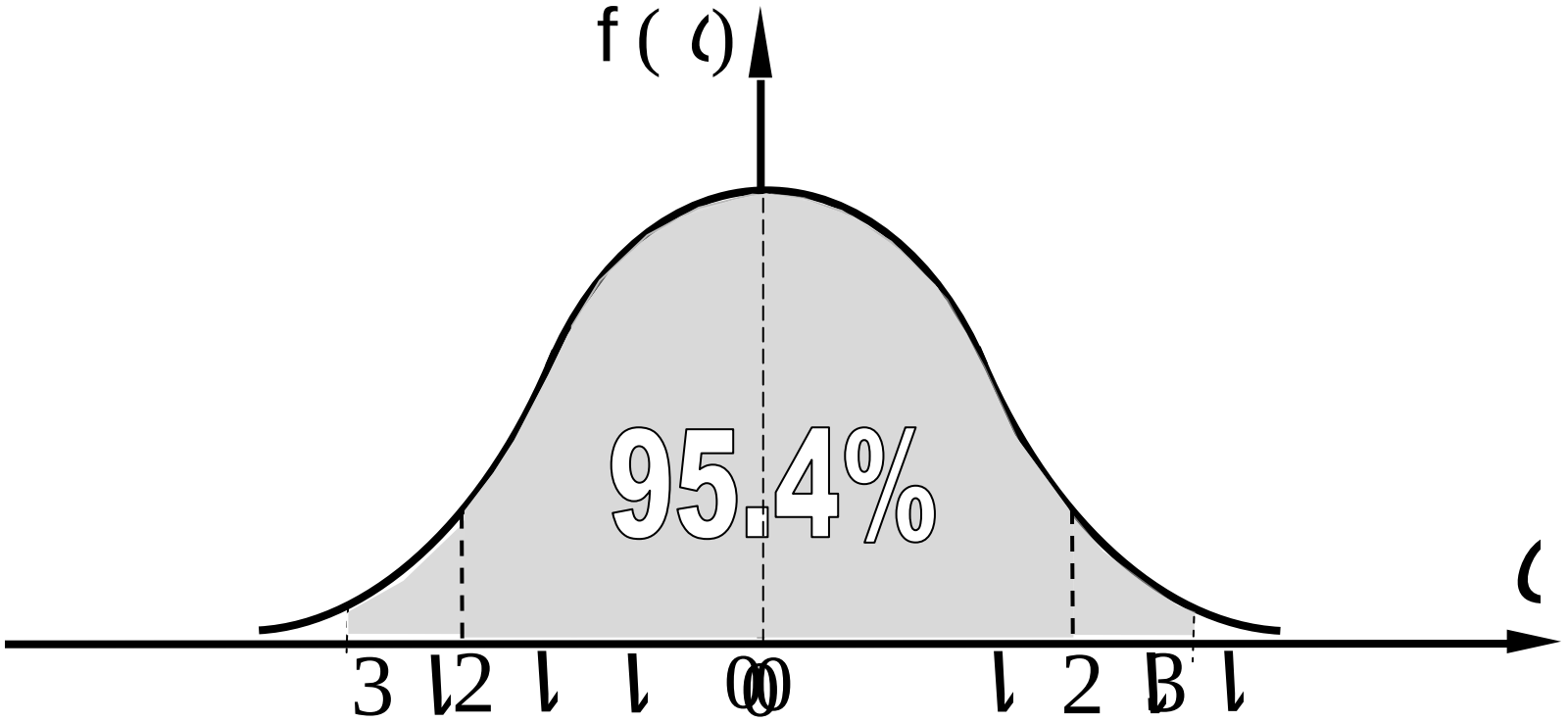

f (ω)
0

$$\int_{\mu-\sigma}^{\mu+\sigma} f(x)\,dx \qquad (\mu-\sigma,\ \mu+\sigma)$$

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

$$p \int_{\mu-\sigma}^{\mu+\sigma} f(x)\,dx = 0.683$$

$(\mu-\sigma,\ \mu+\sigma)$ **68.3%**



(l, l) **68.3%**

(2 l, 2 l) **95.4%**

(3 l, 3 l) **99.7%**

(3 l, 3 l) (3 l

n

x_i

$x_i - x_0$

n

$$\frac{\sum_{i=1}^{n}(x_i - x_0)}{n} \quad \frac{\sum_{i=1}^{n} x_i - nx_0}{n} \quad \frac{\sum_{i=1}^{n} x_i}{n} \quad x_0 \quad \bar{x} \quad x_0$$

$\bar{x}$

$$\lim_{no\ f} \sum_{i\ 1}^{n} (x_i \quad x_0) \quad 0$$

$$\bar{x} \quad x_0$$

(2)

x_i

$$x_G$$

$$f(x) \quad \sum_{i=1}^{n} (x_i \quad x_G)^2$$

$$\frac{df(x)}{dx_G} \quad 0$$

$$\frac{df(x)}{dx_G} \quad 2\sum_{i=1}^{n} (x_i \quad x_G) \quad 2\sum_{i=1}^{n} x_i \quad 2nx_G \quad 0$$

$$x_G \quad \frac{1}{n}\sum_{i=1}^{n} x_i \quad \bar{x}$$

$$x_G \quad \frac{1}{n} \sum_{i=1}^{n} x_i \quad \bar{x}$$

$\bar{x}$

$\bar{x}$

$\bar{x}$

$x_i \quad \bar{x}$

S_x

$$S_x \quad \sqrt{\frac{1}{n \quad 1} \sum_{i \quad 1}^{n} (x_i \quad \bar{x})^2}$$

S_x

S_x

S_x

68.3% $(\bar{x} \quad S_x, \bar{x} \quad S_x)$

$\bar{x}$

$(\bar{x}_i \quad x_0)$

$\bar{x}$

$$S_{\bar{x}} \quad \frac{1}{\sqrt{n}} S_x \quad \sqrt{\frac{1}{n(n \quad 1)} \sum_{i \quad 1}^{n} (x_i \quad \bar{x})^2}$$

$$S_{\bar{x}} \quad \frac{1}{\sqrt{n}} S_x \quad \sqrt{\frac{1}{n(n \quad 1)} \sum_{i \quad 1}^{n} (x_i \quad \bar{x})^2}$$

n $S_{\bar{x}}$ $\bar{x}$

n $S_{\bar{x}}$

n>**10** $S_{\bar{x}}$ n

$\bar{x}$