

Gaussian of the form :

$$f(\epsilon, \delta s) \approx \frac{1}{\xi \sqrt{\frac{2\pi}{\kappa} (1 - \beta^2/2)}} \exp \left[ \frac{(\epsilon - \bar{\epsilon})^2}{2} \frac{\kappa}{\xi^2 (1 - \beta^2/2)} \right]$$

thus implying