

$$= \frac{1}{2\pi} (s-t)^{2N} (r-t)^{4N}$$

$$\times \det(f'(t) - f''(t), f''(t), f'''(t))$$

and this is upper bounded!

$$\varepsilon_n = \hat{\mu}''(\hat{\theta})$$

$$= \hat{\mu}''(\hat{\theta}) + \varepsilon''(\hat{\theta})$$

$$\text{Claim: } \varepsilon''(\hat{\theta})$$

is indep of $\hat{\theta}$??

a meacher is asymmetric rv?

$$P(\varepsilon''(\hat{\theta}) > x)$$

$$\hat{\theta} = \text{point s.t. } \varepsilon'(\hat{\theta}) = 0!$$

so might be indep??

$$\det(A + K)$$

$$K = (s-t)^{\alpha} K' \quad \mathbb{E} \|K'\|^2 < \infty$$

$$= \sum_{\sigma \in S_n} \prod_{i=1}^n (A + K)_{i\sigma(i)}$$

$$= \sum_{\sigma \in S_n} \prod_{i=1}^n (A + (s-t)^{\alpha} K')_{i\sigma(i)}$$

$$K' < \infty$$

$$(\text{as } \mathbb{E} \|Z\|^2 < \infty)$$