

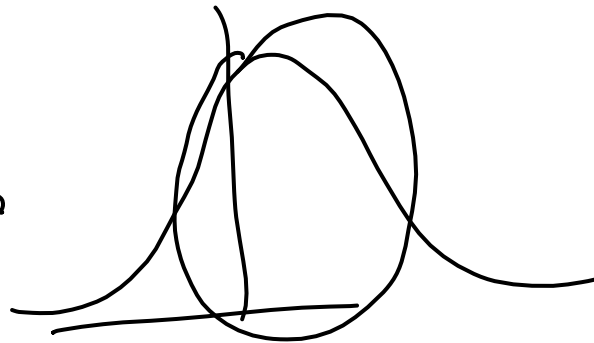
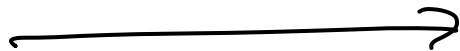
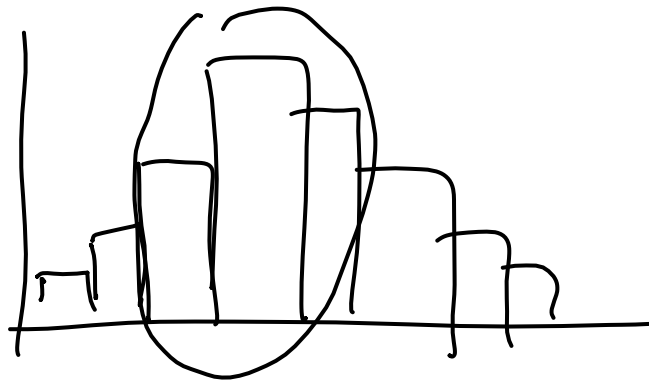
$$\binom{n}{n/2} \quad \text{when } n \text{ is large?}$$

$$n! \approx \sqrt{2\pi n} \, n^n \quad [\text{Stirling 1700s}].$$

[H. Robbins 1952 gives an upper bound]

$$\binom{n}{n/2} \approx \frac{\sqrt{2\pi n}}{\sqrt{2\pi (n/2)}} \frac{n^n}{\left(\frac{n}{2}\right)^{n/2}}$$

$$\sum_{k=-3}^3 \binom{n}{\frac{n}{2} + k}$$



$$\sum_{k=0}^{l+m} \binom{n}{k}$$

Moments [Laplace]

Chebyshev

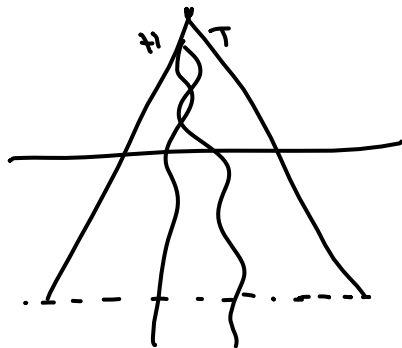
----- 20th

A.A. Markov

H. Borel } 1909

Cantelli

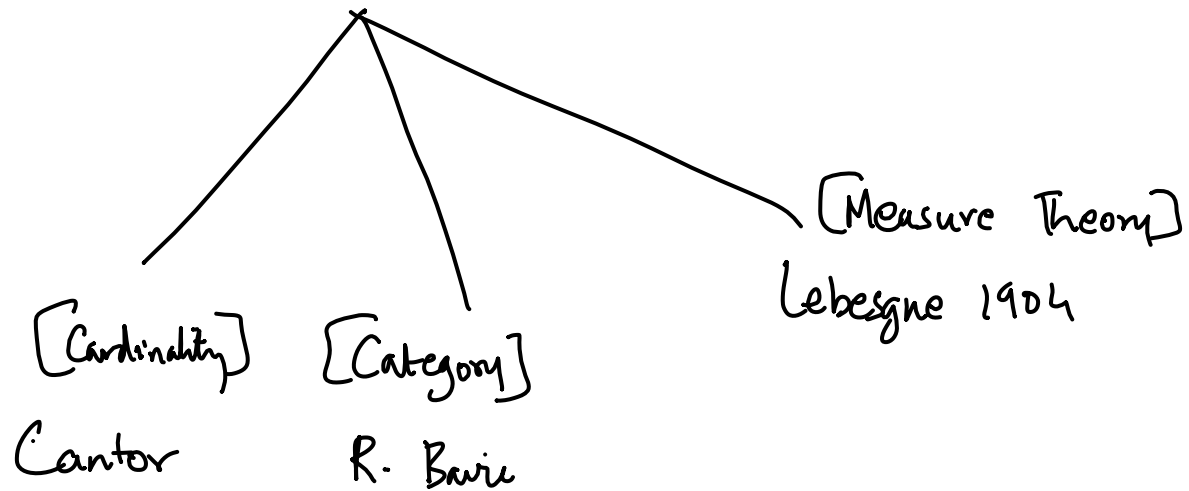
Strong Law of
Large Numbers



Cadlag functions

1803

Fourier



1931. J Radon , Otto Nikodym

1933. A - Kolmogorov.