3) Conversione almost shrely $P\left[\omega\right]\lim_{n\to\infty}\gamma_n(\omega)=\gamma(\omega)=1$ Weaker Conventine in distribution & ("weak conventince")

Strength:

Conventince in probability Stronger Convergina almost sweety Memork convertience almost surely > conversance in probability > convensance in distribution Stochostic Conventine Def Yn -> c ; F Yn -> Y Stochospically in probability where P[Y=c]=1. (i.e. HE>0 lim P[14-c/2]=1) Equivalently, $\lim_{n\to\infty} M_n(t) = e^{ct}$ on (-8,8) (for some 8>0)