## ERDŐS-RÉNYI LAW OF LARGE NUMBERS IN NONCONVENTIONAL AND AVERAGING SETUPS.

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ABSTRACT. I will talk about the functional Erdős–Rényi law of large numbers for "nonconventional" sums of the form  $\Sigma_n = \sum_{m=1}^n F(X_m, X_{2m}, ..., X_{\ell m})$  where  $X_1, X_2, ...$  is a sequence of exponentially fast  $\psi$ -mixing random vectors and F is a Borel vector function. I'll discuss also another extension of this law to the averaging setup.