

Key phrases from papers on neural correlations.

- (Moreno-Bote et al., 2014) We found that large networks receiving finite information must contain correlations approximately proportional to the product of the derivatives of the tuning curves (referred to as differential correlations, see below), which are solely responsible for the information limitation.
- (Moreno-Bote et al., 2014) Thus, only differential correlations can make information saturate as N increases; other correlations can decrease information, but cannot make it saturate.
- (Moreno-Bote et al., 2014) Notably, the presence of the differential component cannot be revealed by plotting the correlations as a function of the difference in preferred stimuli. The correlation coefficients estimated empirically from 1,000 trials looked essentially the same whether or not there were information-limiting correlations (Fig. 6c).
- (Moreno-Bote et al., 2014) First, we found that, when information is limited, the limit is a result of differential correlations; that is, correlations proportional to the product of the derivatives of the tuning curves.