



**Fig S4. Comparing IWPs to power law estimated periods and plotting eigenvalues of ANM's slowest modes to the lengths of proteins.**

(A) The IWPs are compared to the power-law estimated periods for the combined ANM modes of ubiquitin, FGF2 and HPNAP ( $\sigma_p = 0.68$ ). (B) The ANM eigenvalues of the slowest modes are plotted against protein sizes (the number of residues in a protein) for a previously published set of non-homologous 1228 proteins [12].