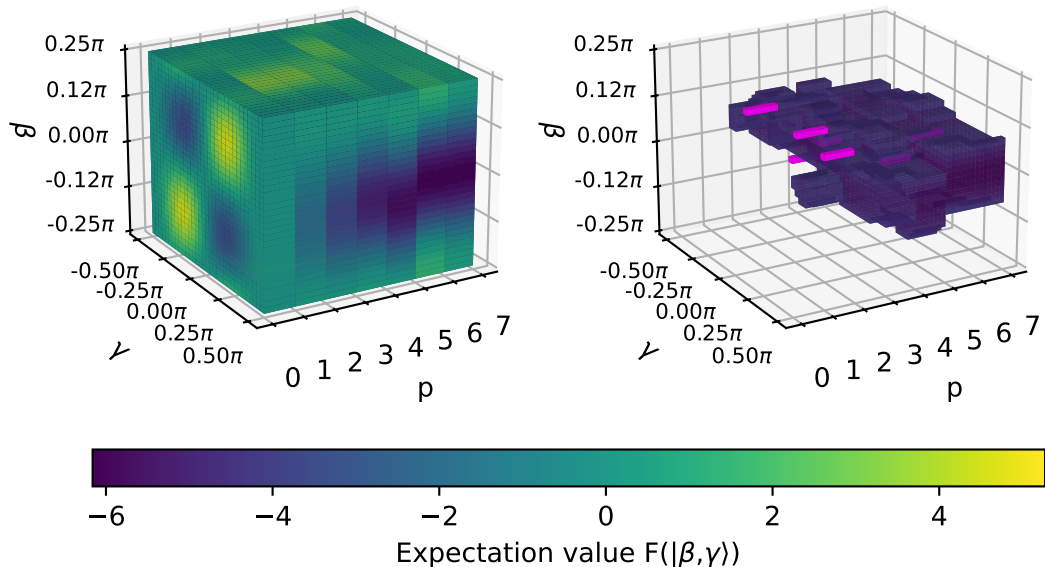


# Expectation Values for QAOA with increasing p for a 14 qubit problem instance, parameters optimized using the COBYLA method



**Best  $\beta$ :** [-0.5900625540803113, -0.46500407786439907, -0.22860377712366078, 0.151239502214477, 0.12291734517688094, 0.11444010399088764, -0.0760062738771724]  $\beta$   
**Best  $\gamma$ :** [0.3891994987667163, 0.7856178031065408, 0.7710445055445874, -0.9382418333135, -1.1597656808324999, -0.049573106308131276, 0.05067084925144827]  $\gamma$