Table 1: Table containing the principal mesons for all the flavor combinations we can explore in our simulations (uu, us, ss, uc, sc, cc). The table shows the name we normally use to denote the different channels in the results presented. The table also shows the operator used on the lattice to simulate the different states. In order to connect lattice data to the quark model and experimental data, we present J^{PC} and $n^{2s+1}L_J$. Moreover, the table shows the different names of the particles/states in each channel. This data has been extracted from the Particle Data Group (PDG). As we are interested on symmetry restorations, in particular on $U(1)_A$ and $SU(2)_A$, we show the connections between the channels by colors. Cells with same color represent that they are connected via a symmetry and we expect them to both cells to be degenerate in mass. $U(1)_A$ links are expressed with a pink color, $SU(2)_A$ with a blue color. Any other restoration in the axial-vector sector (us, ss, sc) might be related to any other mechanism different to $SU(2)_A$. We express with a green any other restoration seen in the simulations that is not explicitely related to $SU(2)_A$ and $U(1)_A$.

Name	Operator	J^{PC}	$n^{2s+1}L_J$	uu	us	ss	uc	sc	cc
γ_5	$\bar{\Psi}\,\tau_\alpha\gamma_5\,\chi$	O^{-+}	$1^1\,S_0$	$\pi^\pm$	K	$\eta/\eta'(958)$	D	$D_s^\pm$	$\eta_c(1S)$
γ_i	$\bar{\Psi}\,\tau_\alpha\gamma_i\,\chi$	1^{--}	$1^3\,S_1$	$\rho(770)$	$K^*(892)$	$\phi(1020)/\omega(782)$	D^*	$D_s^{*\pm}$	$J/\Psi(1S)$
$\gamma_i\gamma_5$	$\bar{\Psi}\,\tau_\alpha\gamma_\mu\gamma_5\,\chi$	1^{++}	$1^3\,P_1$	$a_1(1260)$	K_{1A}	$f_1(1420)/f_1(1285)$	$D_1(2430)$	$D_{s1}(2460)^\pm$	$\chi_{c1}(1P)$
$\mathbb{1}$	$\bar{\Psi}\,\tau_i\mathbb{1}\,\chi$	O^{++}	$1^3\,P_0$	$a_0(1450)$	$K_0^*(1430)$	$f_0(1710)/f_0(1370)$	$D_0^*(2400)$	$D_{s0}^*(2317)^\pm$	$\chi_{c0}(1P)$
$\gamma_i\gamma_j$	$\bar{\Psi}\,\tau_\alpha\gamma_i\gamma_j\,\chi$	1^{+-}	$1^1\,P_1$	$b_1(1235)$	K_{1B}	$h_1(1380)/h_1(1170)$	$D_1(2420)$	$D_{s1}(2536)^\pm$	$h_c(1P)$