		$\beta = 10^{-5}$	$\beta = 10^{-3}$	$\beta = 10^{-1}$	$\beta = 10^{1}$	$\beta = 10^{3}$
$\kappa = 0$	$\mathcal{J}_{uc}$	0,026 7	0,026 7	0,026 7	0,026 7	0,026 7
	$\mathcal{J}_{c}$	0,000 1	0,003 9	0,025 0	0,026 7	0,026 7
$\kappa = 1$	$\mathcal{J}_{uc}$	0,032 9	0,032 9	0,032 9	0,032 9	0,032 9
	$\mathcal{J}_{c}$	0,000 1	0,005 4	0,031 3	0,032 9	0,032 9
$\kappa = -1$	$\mathcal{J}_{uc}$	0,020 9	0,020 9	0,020 9	0,020 9	0,020 9
	$\mathcal{J}_{c}$	0,000 1	0,002 6	0,019 2	0,020 9	0,020 9

Table 1: Flow Control No-Flux Problem: Cost when $\vec{w} = \vec{0}$ and optimal control cost for a range of κ, β. Note that for $\beta = 10$, the cost functonals differ by 10−5, while for $\beta = 10^3$ they differ by 10^{-7} (++ two in the wrong direction ++).

		$\beta = 10^{-5}$	$\beta = 10^{-3}$	$\beta = 10^{-1}$	$\beta = 10^{1}$	$\beta = 10^{3}$
$\kappa = 0$	$\mathcal{J}_{uc}$	0,158 5	0,158 5	0,158 5	0,158 5	0,158 5
	$\mathcal{J}_{c}$	0,000 4	0,007 7	0,130 2	0,158 2	0,158 5
$\kappa = 1$	$\mathcal{J}_{uc}$	0,212 4	0,212 4	0,212 4	0,212 4	0,212 4
	$\mathcal{J}_{c}$	0,000 4	0,010 3	0,185 2	0,212 1	0,212 4
$\kappa = -1$	$\mathcal{J}_{uc}$	0,403 1	0,403 1	0,403 1	0,403 1	0,403 1
	$\mathcal{J}_{c}$	0,000 5	0,008 6	0,173 9	0,386 7	0,402 9

Table 2: Flow Control Dirichlet Problem: Cost when $w = 0$ and optimal control cost for a range of κ, β. For $\beta = 10$, the cost functionals differ by 10^-4 for $\kappa = 0$ and $\kappa = 1$ and by 10^-2 for $\kappa = -1$. For $\beta = 10^3$, the cost functionals differ by 10^{-7} for $\kappa = 0$, by 10^{-6} for $\kappa = 1$, and by 10^{-4} for $\kappa = -1$.

		$\beta = 10^{-5}$	$\beta = 10^{-3}$	$\beta = 10^{-1}$	$\beta = 10^{1}$	$\beta = 10^{3}$
$\kappa = 0$	$\mathcal{J}_{uc}$	0,019 0	0,019 0	0,019 0	0,019 0	0,019 0
	$\mathcal{J}_{c}$	0,000 0	0,000 7	0,013 7	0,018 9	0,019 0
$\kappa = 1$	$\mathcal{J}_{uc}$	0,019 4	0,019 4	0,019 4	0,019 4	0,019 4
	$\mathcal{J}_{c}$	0,000 0	0,000 7	0,014 2	0,019 3	0,019 4
$\kappa = -1$	$\mathcal{J}_{uc}$	0,020 3	0,020 3	0,020 3	0,020 3	0,020 3
	$\mathcal{J}_{c}$	0,000 0	0,000 8	0,014 5	0,020 2	0,020 3

Table 3: Source Control No-Flux Problem: Cost when $w = 0$ and optimal control cost for a range of κ, β. The value of $\mathcal{J}_c$ is of order 10^{-5}. Note that for $\beta = 10$, the cost functonals differ by 10−4, while for $\beta = 10^3$ they differ by 10^{-7}.

		$\beta = 10^{-5}$	$\beta = 10^{-3}$	$\beta = 10^{-1}$	$\beta = 10^{1}$	$\beta = 10^{3}$
$\kappa = 0$	$\mathcal{J}_{uc}$	0,015 8	0,015 8	0,015 8	0,015 8	0,015 8
	$\mathcal{J}_{c}$	0,000 0	0,002 1	0,014 4	0,015 8	0,015 8
$\kappa = 1$	$\mathcal{J}_{uc}$	0,021 3	0,021 3	0,021 3	0,021 3	0,021 3
	$\mathcal{J}_{c}$	0,000 0	0,002 6	0,019 1	0,021 2	0,021 3
$\kappa = -1$	$\mathcal{J}_{uc}$	0,013 8	0,013 8	0,013 8	0,013 8	0,013 8
	$\mathcal{J}_{c}$	0,000 0	0,001 8	0,012 8	0,013 8	0,013 8

Table 4: Source Control Dirichlet Problem: Cost $\mathcal{J}_{uc}$ of applying no control (i.e., $\vec{w} = \vec{0}$)and optimal control cost $\mathcal{J}_c$ for a range of values of the interaction strength κ and regularization parameter β. The value of $\mathcal{J}_c$ is of order 10^{-5}. Note that for $\beta = 10$, the cost functonals differ by $10-5$, while for $\beta = 10^3$ they differ by 10^{-8}, 10^{-7} and -10^{-8} +++ Check and discuss +++.