

Contents

1	Introduction	1
2	Preliminaries	3
2.1	Superconformal blocks	3
2.2	The OPE selection rules	6
2.3	Topological structure constants	7
3	Line defects in gauge theory	8
3.1	Localization results	8
3.2	Operator multiplicities in gauge theories	10
3.3	Strong coupling	11
4	Crossing equations	13
4.1	The single correlator \mathcal{D}_1	14
4.2	The full mixed system	15
5	Numerical results	17
5.1	Dimension bounds	17
5.2	OPE bounds	19
6	Analytical results	25
6.1	Setup	26
6.2	First order perturbation of $\langle \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \rangle_{(2,2)}$	28
6.3	Second order perturbation of $\langle \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \rangle_{(2,2)}$	29
7	Conclusions	31
A	Blockology	32
A.1	The bosonic pieces	32
A.2	Explicit superblocks	34
B	Comments on the derivation of the crossing equations	36
C	The analytic solutions to the crossing equations	37
D	First order perturbation of $\langle \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \mathcal{D}_1 \rangle_{(1,0)}$	40