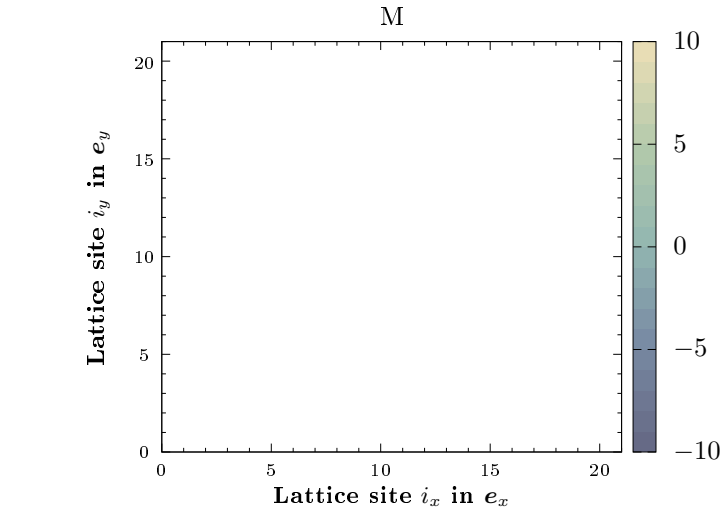
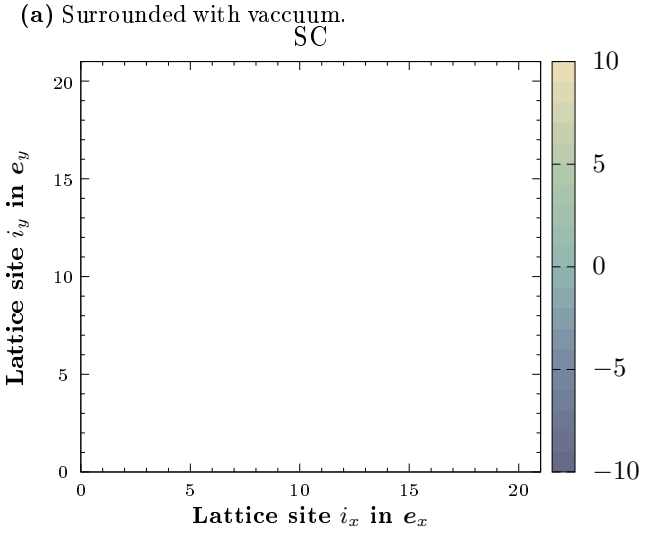
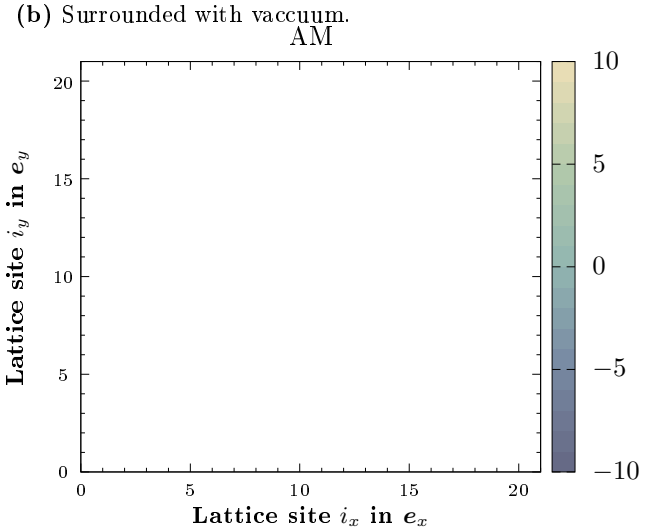
1 Benchmark



(a) Surrounded with vaccuum.

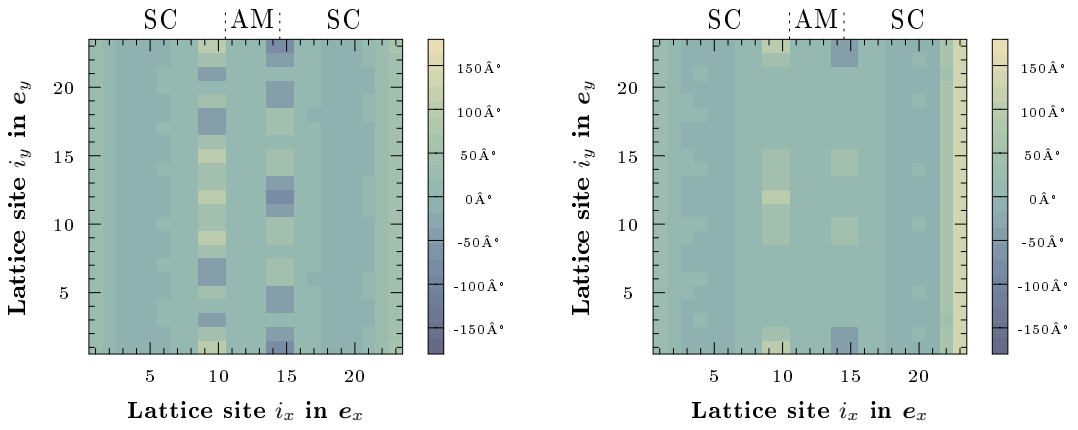


(b) Surrounded with vaccuum.



(c) Surrounded with vaccuum.

Figure 1: Benchmark for the currents $\sqrt{\langle I_i^x \rangle^2 + \langle I_i^y \rangle^2}$ in M, AM and SC



(a) Surrounded with vaccuum. $\varphi = 27\,\text{deg}$

(b) Surrounded with vaccuum. $\varphi = 27 + 90\,\text{deg}$

Figure 2: Benchmark for the phase $\arg(\Delta)$ in an SC, AM, SC material. On the left most side we have $\Delta = |\Delta_{\text{guess}}|e^{\mathrm{i}\frac{\pi}{6}}$ and on the right most side $\Delta = |\Delta_{\text{guess}}|e^{\mathrm{i}\left(\frac{\pi}{6}+\varphi\frac{\pi}{180}\right)}$

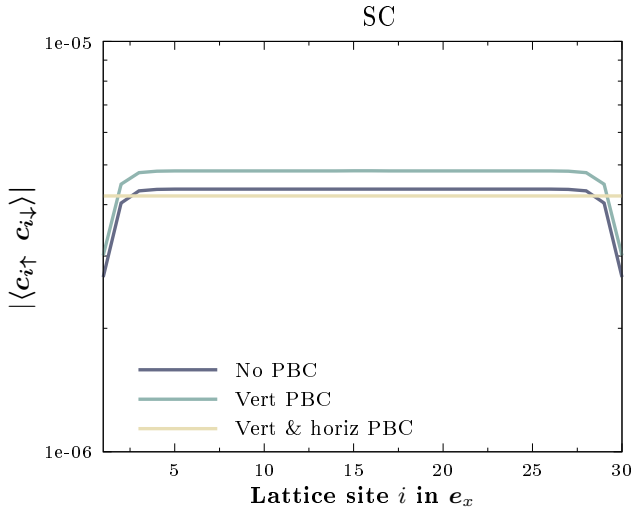


Figure 3: Mean value over the y-axis of the correlation function $|\langle c_{i\uparrow}c_{i\downarrow}\rangle|$ for different boundary conditions in a SC.

1.1 Current

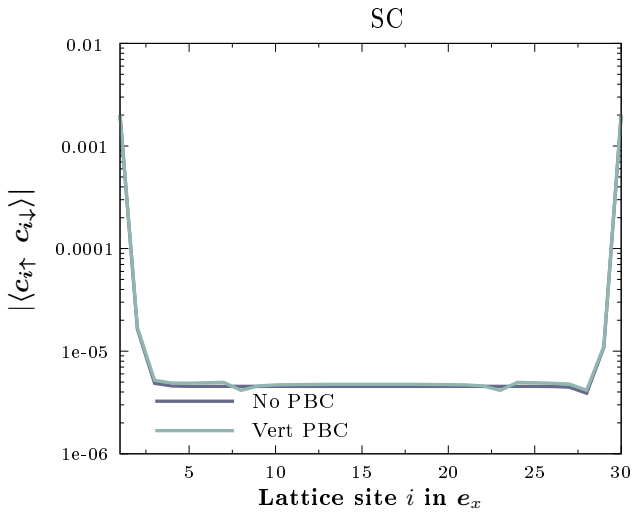
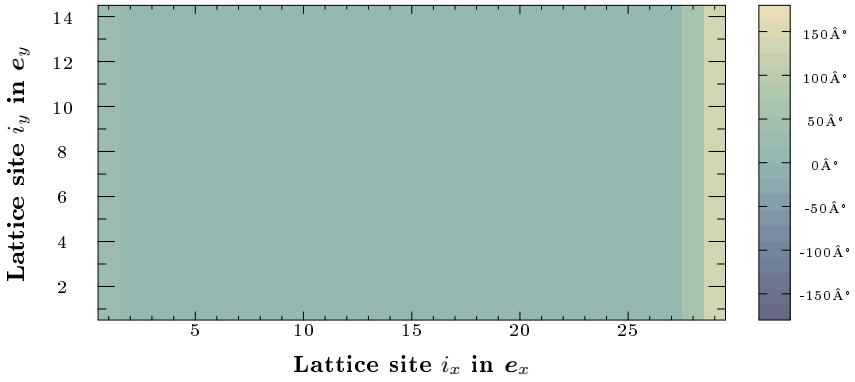
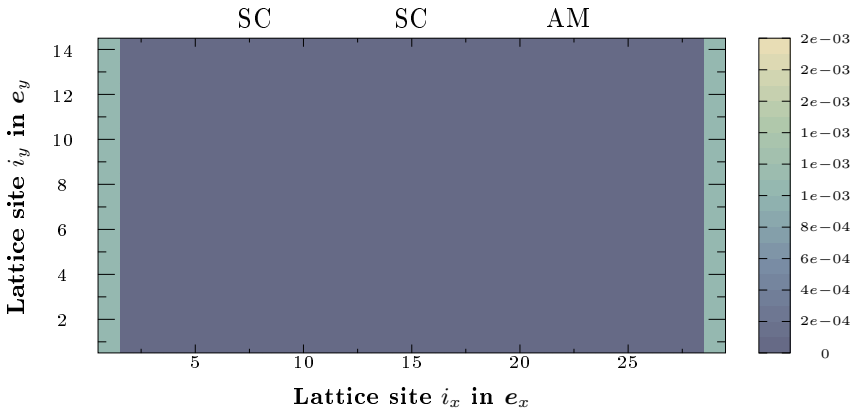


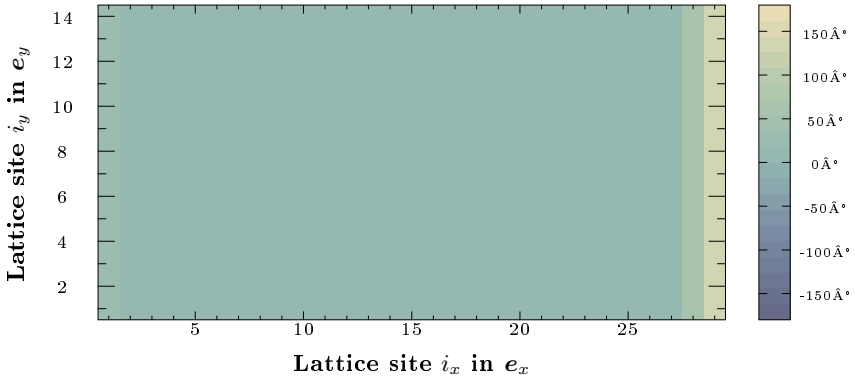
Figure 4: Mean value over the y-axis of the correlation function $|\langle c_{i\uparrow} c_{i\downarrow}\rangle|$ for different boundary conditions in a SC.



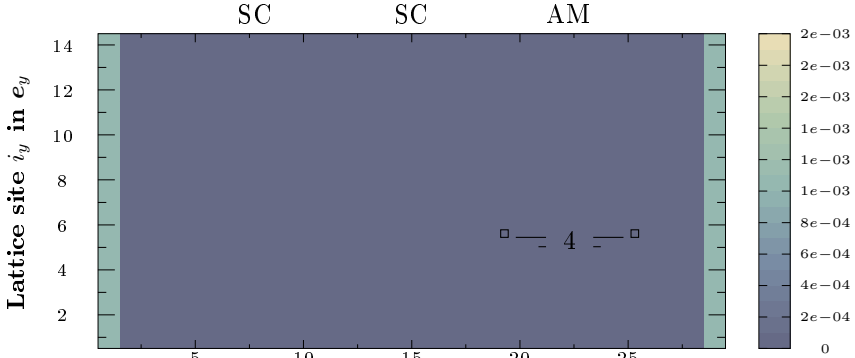
(a) Phase map. Surrounded with vaccuum. $\varphi = 117\,\mathrm{deg}$



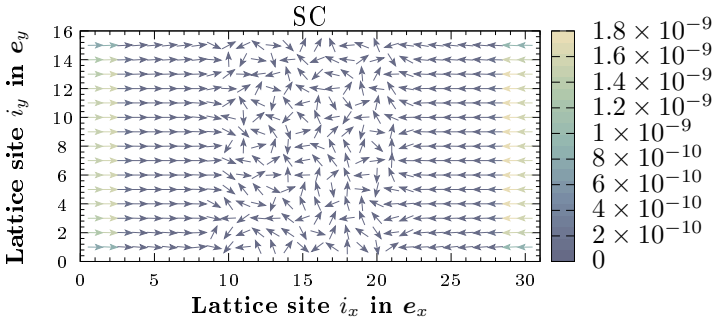
(b) Heat map. Surrounded with vaccuum. $\varphi = 117\,\mathrm{deg}$



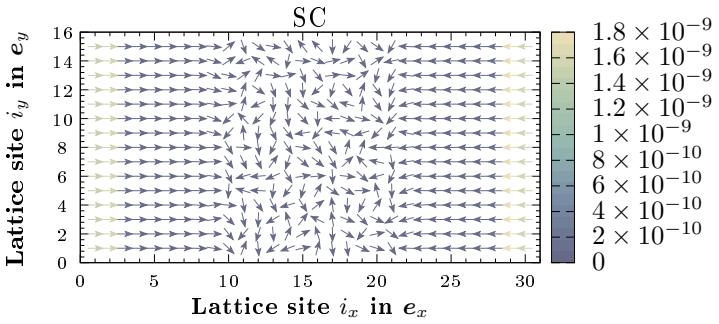
(c) Phase map. Vert BC.. $\varphi = 117\,\mathrm{deg}$



1.1.1 Litterature Model



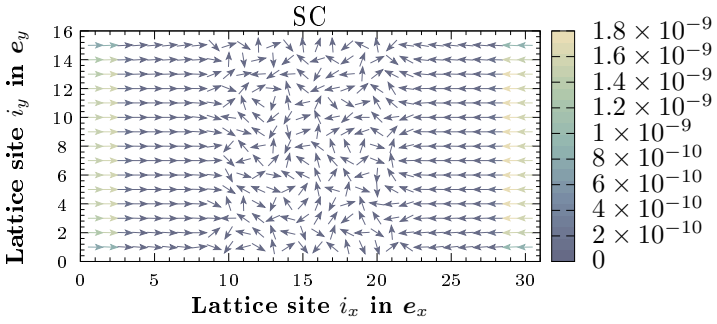
(a) Current map. Surrounded with vacuum. $\varphi = 117\,\mathrm{deg}$



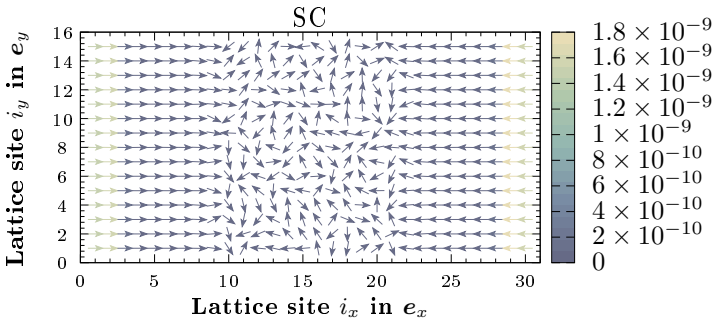
(b) Current map. Vert BC. $\varphi = 117\,\mathrm{deg}$

Figure 6: Current map for two different boundaries conditions according to literature model 1.

1.1.2 Litterature Model 2



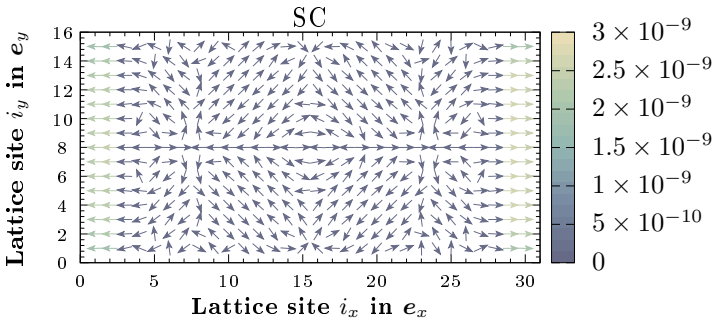
(a) Current map. Surrounded with vacuum. $\varphi = 117\,\mathrm{deg}$



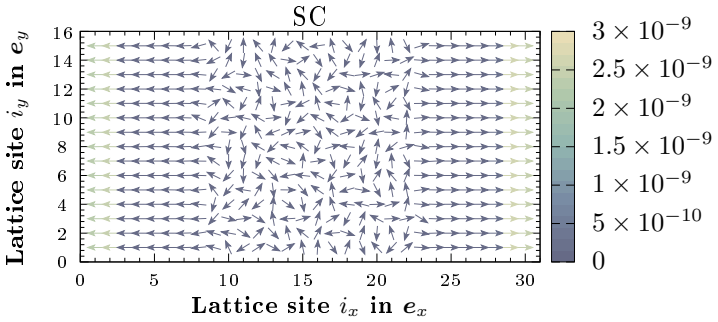
(b) Current map. Vert BC. $\varphi = 117\,\mathrm{deg}$

Figure 7: Current map for two different boundaries conditions according to literature model 2.

1.1.3 Own Model



(a) Current map. Surrounded with vacuum. $\varphi = 117\,\mathrm{deg}$



(b) Current map. Vert BC. $\varphi = 117\,\mathrm{deg}$

Figure 8: Current map for two different boundaries conditions according to literature model 1.