Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1,1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ positive and mixed-type part

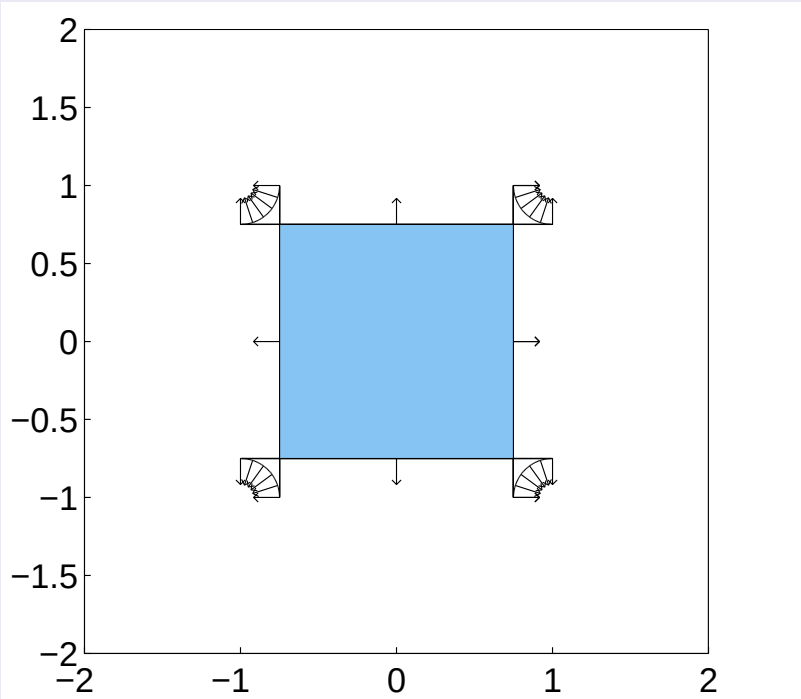

Figure: difference of directed sets $J_2([-1,1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \frac{1}{4}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1,1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ positive and mixed-type part

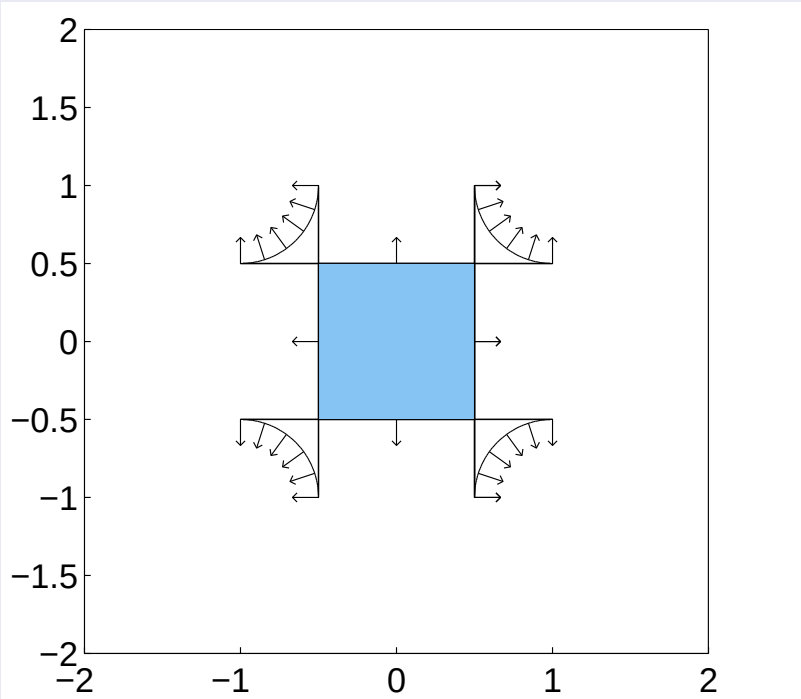

Figure: difference of directed sets $J_2([-1,1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \frac{1}{2}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ positive and mixed-type part

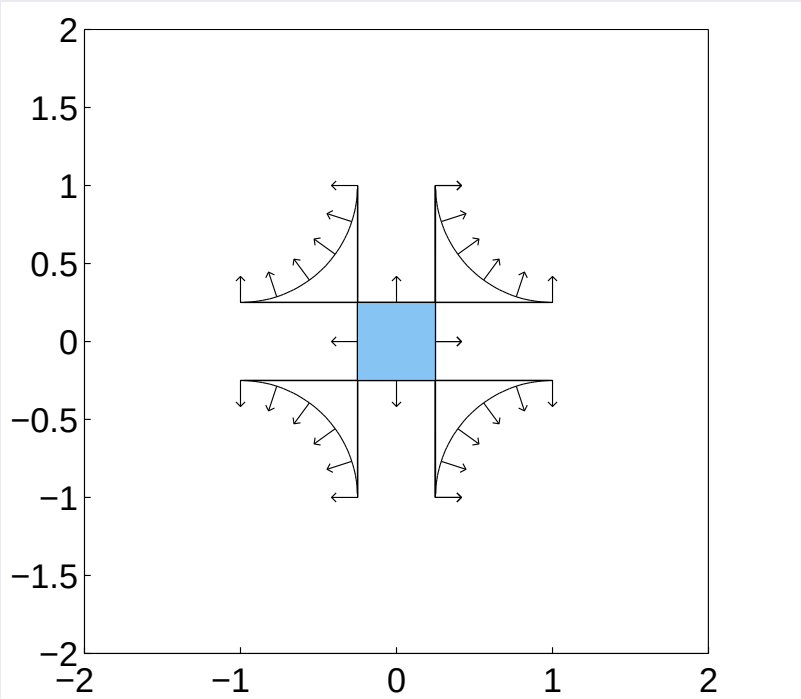

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \frac{3}{4}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ origin and mixed-type part

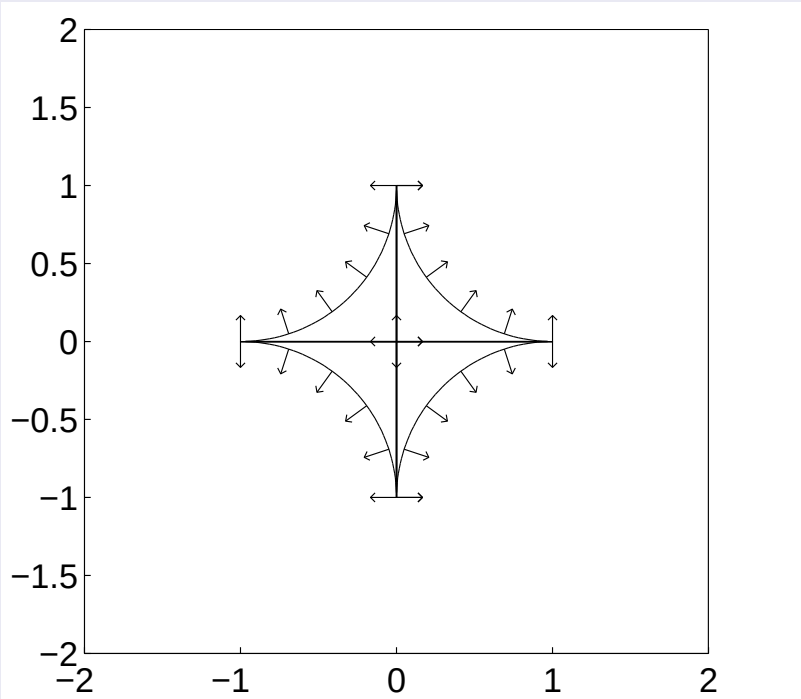

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r = 1}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ only mixed-type part

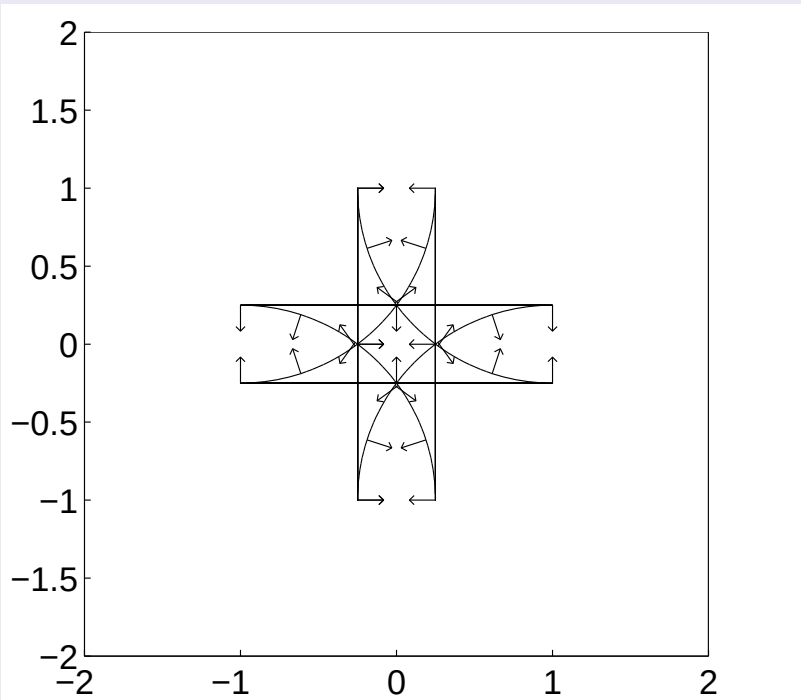

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \frac{5}{4}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ origin and mixed-type part

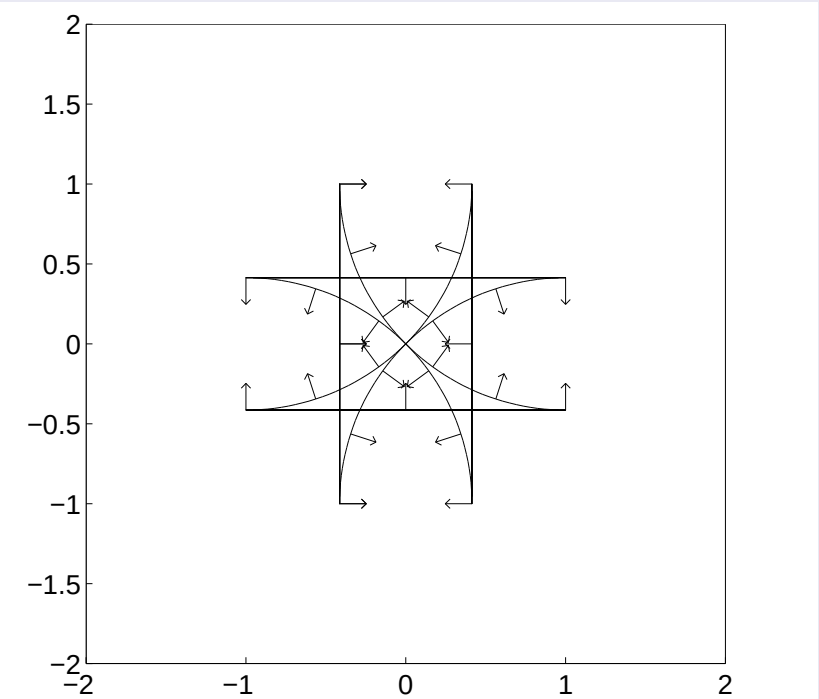

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \sqrt{2}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ negative and mixed-type part

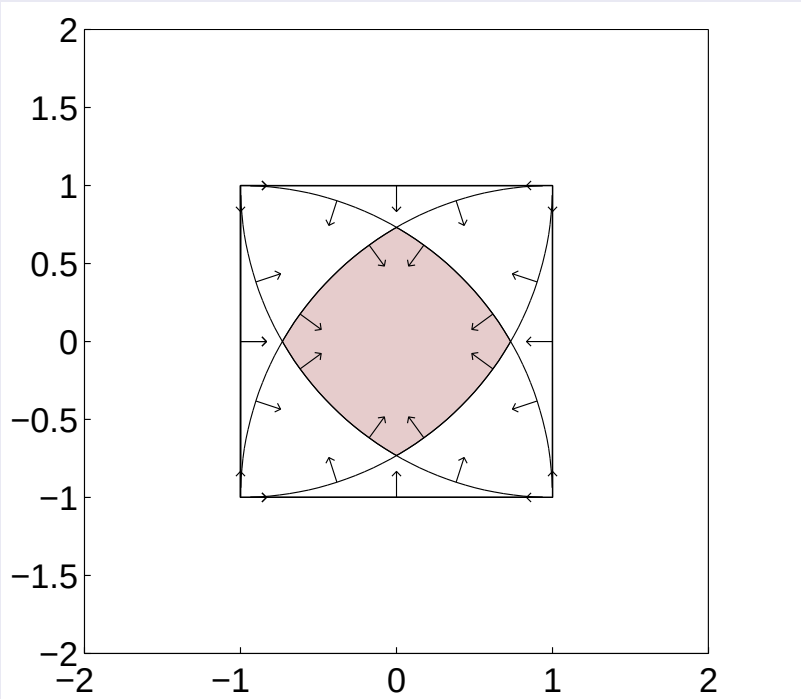

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \mathbf{2}$

Visualized Directed Sets

set difference $\overrightarrow{A} := J_2(C) - J_2(D)$:

data: $C = [-1, 1]^2$ and $D = \mathbf{r}B_1(0)$

visualization: $V_2(\overrightarrow{A}) =$ negative and mixed-type part

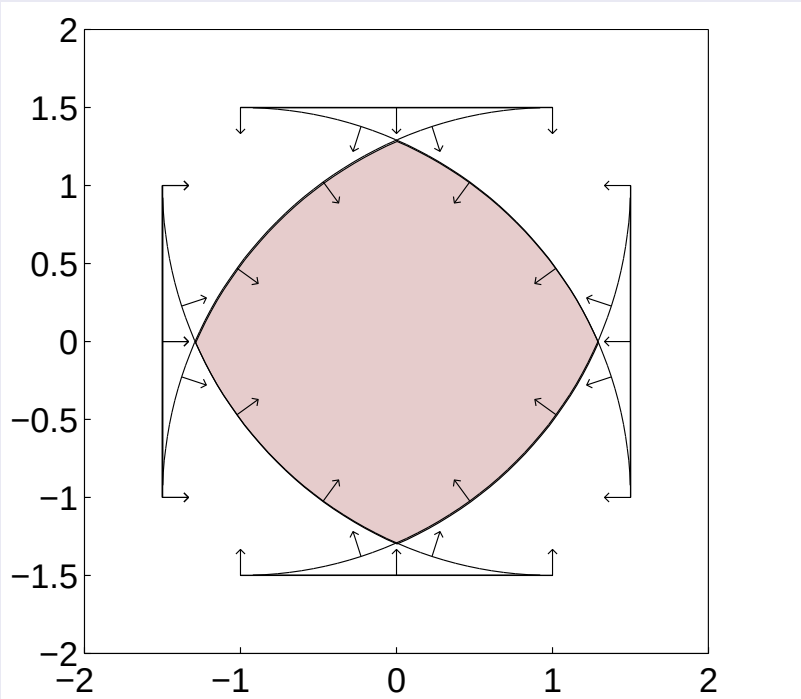

Figure: difference of directed sets $J_2([-1, 1]^2) - J_2(\mathbf{r}B_1(0))$, $\mathbf{r} = \frac{5}{2}$