some point $\boldsymbol{x}$ is given by

$$\begin{aligned} u_i(\boldsymbol{x}) &= \Gamma_{ij}(\boldsymbol{x}-\boldsymbol{x}^+)\,F_j^+ + \Gamma_{ij}(\boldsymbol{x}-\boldsymbol{x}^-)\,F_j^- \\ &= \left[\Gamma_{ij}(\boldsymbol{x}-\boldsymbol{x}^+) - \Gamma_{ij}(\boldsymbol{x}-\boldsymbol{x}^-)\right] F_j^+ \\ &= \left[\Gamma_{ij}(\boldsymbol{x}-\ell\boldsymbol{e}_x) - \Gamma_{ij}(\boldsymbol{x}+\ell\boldsymbol{e}_x)\right] F_j^+ \end{aligned} \tag{5.58}$$

where $\Gamma_{ij} = J_{ij}$ in 2D and $\Gamma_{ij} = G_{ij}$ in 3D. If $|\boldsymbol{x}| \gg \ell$, we can Taylor expand Γ_{ij} near $\ell = 0$, and find to leading order

$$\begin{aligned} u_i(\boldsymbol{x}) &\simeq \left\{\left[\Gamma_{ij}(\boldsymbol{x}) - \Gamma_{ij}(\boldsymbol{x})\right] - \left[x_k^+\partial_k\Gamma_{ij}(\boldsymbol{x}) - x_k^-\partial_k\Gamma_{ij}(\boldsymbol{x})\right]\right\} F_j^+ \\ &= -2x_k^+\left[\partial_k\Gamma_{ij}(\boldsymbol{x})\right] F_j^+ \end{aligned} \tag{5.59}$$