$$p_1 = (E, \mathbf{p}) \mathbf{B}$$

$$k_1 = (E, \mathbf{k}) \mathbf{B}$$

$$k_2 = (E, -\mathbf{k}) \mathbf{A}'$$

$$B' \mathbf{p}_2 = (E, -\mathbf{p})$$

$$p_1 = (E_1, \mathbf{p})$$

$$k_1 = (E, E)$$

$$k_2 = (E, -E)$$

$$p_2 = (E_2, -\mathbf{p})$$