$2\langle \mathcal{P}(\mathcal{A} + \mathcal{L}_{\mathcal{G}})e, e \rangle = 2\beta \int_{0}^{1} e^{T} P \frac{d^{2}}{dx^{2}} e + 2\alpha \int_{0}^{1} e^{T} P e^{-} + 2 \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e^{-} + 2\alpha \int_{0}^{1} e^{T} P G L e = 2\beta e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{d}{dx} e^{T} P \frac{d}{dx} e|_{0}^{1} - 2\beta \int_{0}^{1} \frac{$